From Financial Crisis to Pandemic: Gender Discrimination and Employment Inequality among Female Workers

Yuhao Zhang

School of Sociology and Social Policy, University of Leeds, Leeds, United Kingdom ss234yz@leeds.ac.uk

Abstract. Throughout recent global shocks, the economy was impacted by recessions and widespread unemployment caused by quarantine measures and social restrictions, with the tertiary service and healthcare sectors being the most severely impacted. This study, based on secondary data, summarizes the effects of the economic downturn on the labor market and analyzes employment trends and inequalities among female workers. Using data from the International Labour Organization (ILO), it examines gender consistency, employment biases against women, and underlying causes of inequality from sociological and ethical perspectives. The results indicate that the unemployment wave triggered by the economic recession is not directly correlated with impacts on women's employment. Instead, the main factors contributing to female unemployment are the need for flexible working hours and the time costs associated with childcare. To lower the risk of unemployment among women, targeted employment policy support should be provided at the policy level, while female workers need to enhance their competitiveness, such as by acquiring digital or AI-related skills, to adapt to the changing labor market.

Keywords: Labour Market, Female Employment, Economic Crisis, Tertiary Industry, Role Congruity

1. Introduction

In times of economic instability, crises often appear as sharp changes in commodity prices or supply that surpass normal acceptable levels [1]. The 2008 financial crisis stemmed from heavy borrowing in the U.S. housing market and banks, causing broad effects on the world economy. Over the past two decades, such crises have led to increased employee turnover and higher unemployment rates, with particularly significant impacts on marginalized groups. As insecure credit and debt structures have accumulated, recent global shocks have worsened economic instability, showing the limits of the current financial system in preventing recessions [2].

In such a context, vulnerable populations face higher social and economic risks, as contemporary society exhibits a complex and dispersed structure in which only a minority of groups have access to adequate social welfare and support, while the majority are limited in reaching their potential. Individuals who are disadvantaged due to gender, age, disability, migration status, minority identity, poverty, or restricted freedoms are more susceptible to the impacts of economic crises, with limited employment opportunities and overrepresentation in sectors highly sensitive to macroeconomic

fluctuations. This exclusion not only diminishes their quality of life and overall well-being but also restricts future development opportunities and social mobility. Furthermore, groups with specific vulnerability characteristics generally exhibit a higher reliance on social support and humanitarian assistance during crises than other groups [3]. In the labor market, women face neglect, resulting in gender inequality. Consequently, male employees typically have advantages in career advancement, especially those with children, whose family roles may serve as professional priorities [4]. Besides, in male-dominated industries, female workers experience higher levels of discrimination, bias, and stereotyping [5].

This study aims to analyze the issues of gender discrimination and employment inequality faced by female workers in the context of economic crises. In particular, it integrates multidisciplinary perspectives from sociology, economics, and business management, and uses relevant data from the European Union and the International Labour Organization (ILO) to assess the adverse economic impacts of recent global systemic shocks on female workers [6,7]. By examining the experiences of vulnerable populations, the study seeks to inform government welfare policies while also providing guidance for businesses in humane management practices and enhancing industry reputation. Given that existing research still offers limited attention to the decline in female labor participation during financial crises, particularly in periods of global economic instability, this study further proposes a systematic analytical framework to fully assess the primary social and employment challenges faced by female workers in severe economic environments.

2. The overall impact of economic downturn on the labour market

2.1. Current situation and trends of economic downturn

International Monetary Fund (IMF) declared that the recent pneumonia shock triggered economic lockdowns across multiple industries, leading to major effects, including restricted social interaction, widespread layoffs, pay cuts, and lower productivity in travel, entertainment, and hotels [8]. From March to April 2020, first-time unemployment claims in the U.S. surpassed 6.6 million in a single week, up from about 280,000 two weeks earlier. Subsequently, Russian suspended its oil supply agreements with non-oil-exporting countries, which heavily affected commodity prices. Between January and March, common metal prices declined 15%, natural gas fell 38%, and crude oil fell sharply by 65%, reaching around 40 dollars per barrel. The European Union reported that GDP in European countries grew steadily at 1.6% to 2.8% annually from 2014 to 2019. However, GDP fell sharply by 5.6% during the 2020 pneumonia shock, far exceeding the drop in the 2009 economic crisis. Total unemployment insurance claims during the pandemic were roughly ten times higher than in the 2009 recession [6].

2.2. Economic downturn forecast

The ILO announced that the economic downturn triggered by the recent pneumonia shock has left both women and men facing unpredictable job losses [7]. Globally, female labor experienced a significant wave of joblessness, with employment rates declining by 4.2% for women compared to 3% for men during the pandemic. Due to lockdown measures, the service, care, and manufacturing sectors were heavily impacted, and female workers were less likely to retain their jobs compared to men, who were more represented in finance, medical, and social media sectors that are recognized as more formal industries. In terms of employment, the ILO projected a substantial gender gap in the labor market during the pandemic [7]. Compared with 2019, the number of employed women was

expected to decrease by around 13 million, while male employment levels were predicted to remain largely unchanged. As such, women's employment was forecasted to fall to approximately 1.27 billion in 2021, compared with 2.02 billion men in employment. This disparity implies that only about 43.2% of working-age women worldwide would be employed, thereby highlighting the disproportionate impact of the crisis on female labor force participation.

2.3. Overall changes in the labor market

Throughout the pandemic, the hotel industry faced rapid closures and operational disruptions, hence prompting Marriott International to implement measures such as employee leave and redeployment. This strategy not only demonstrates the company's agile management in times of crisis but reflects its commitment to employee welfare, including maintaining health benefits and short-term disability insurance to provide income support during disruptions. By doing so, Marriott mitigated the impact of the pandemic on its business while balancing the interests of employees, guests, and hotel owners, highlighting its long-term confidence amid an uncertain environment [9].

Meanwhile, this shock accelerated the application and development of automation and artificial intelligence (AI) technologies, leading to shifts in labor skill requirements [10]. AI technologies, particularly machine learning and deep learning, can process complex datasets and simulate virus transmission and drug treatment scenarios, providing decision-making support for pandemic control. This not only enabled researchers to predict real-time pandemic dynamics but also improved the effectiveness of employees with AI programming skills in public health management and health improvement. Therefore, the pandemic posed significant challenges to the industry while acting as a critical catalyst for technological advancement and skill upgrading.

3. Employment challenges faced by female workers during the economic downturn

3.1. Industry distribution and the impact of the economic downturn

Historically, women's participation in the labor market has been constrained by persistent structural biases, highlighting wider social and economic disparities. Research indicates that female workers are disproportionately concentrated in marginal industries, where employment is frequently marked by low pay, insecure job conditions, and restricted opportunities for career progression [11]. These sectors like agriculture, non-durable goods manufacturing, retail trade, and secondary professional services are typically small in scale, rely heavily on assembly-line processes, and demonstrate low productivity and competitive capacity. In addition, the absence of strong labor unions exacerbates workers' vulnerability by limiting access to essential benefits and protections [11]. The persistence of this occupational segregation reflects structural factors that channel women into less profitable industries, reinforcing long-standing inequalities in the division of labour. Consequently, women's overrepresentation in these marginal sectors not only reflects historical patterns of exclusion but also amplifies their vulnerability to external economic shocks and downturns [11]. Despite female labour force participation had increase sharply over the last decades, in fact, the employment rate is incline to employed male worker as dominated labour in the market. Moreover, Heath proposed that woman worker seek to more flexible occupation covers sufficient life-related facilities and welfare assurance [12]. This indicates that women tend to prefer low-paying, slow-paced jobs.

3.2. Pandemic-induced shocks on female-dominated service industries

The ongoing pandemic has severely influenced numerous female-dominated industries, including catering, retail, accommodation services, and the medical and healthcare sectors [13]. As a branch of the service industry, the hotel sector includes diverse operations, including food and beverage services, hospitality services, and leisure or entertainment activities. Meanwhile, the hotel industry more readily suffering from external economic shocks such as pandemic or economic depression. Based on the relative policy announced by government from January to April in 2020, travelers were required to undergo a mandatory 14-day quarantine at home or at a designated location (such as a hotel). In particular, infected individuals were prohibited from visiting any locations, regardless of personal preference or family requests, reflecting the unprecedented stringency of virus control measures. Due to the highly transmissible nature of COVID-19 between individuals, people were required to maintain a safe distance of approximately 2 meters and to avoid gatherings, handshakes, as well as visits to parks, restaurants, retail stores, or other crowded places [14]. It is evident that these preventive measures had a significant impact on related service and retail industries. From January to April 2020, recruitment in the leisure and hospitality sector declined by 45% to 65% [15]. Furthermore, hiring in the life and health insurance industry remained down by 30% to 45% in September 2020, marking the lowest level among all industries.

3.3. Uncertainty in female employment

Employment of women is highly concentrated in the healthcare sector, yet this industry continues to face challenges related to job instability and employee turnover. Based on Alobaid et al., women comprise a significantly larger proportion of the healthcare workforce compared to men [16]. In Australia, 79% of workers in the healthcare and social assistance sector are women, while in the U.S., this figure is 78.4%. Similarly, in the UK, over 89.4% of nursing and midwifery professionals are women, and in the US, the nursing profession is also predominantly female. Although women dominate the global healthcare workforce, the health crisis has highlighted workforce shortages and difficulties in retaining employees. Hospitals and rural healthcare institutions, in particular, are experiencing staff turnover, as well as imbalances in recruiting and retaining core support personnel such as physicians, registered nurses (RNs), coders, schedulers, and nursing assistants.

Employment in the healthcare sector is highly sensitive to overall economic conditions, and ongoing recruitment challenges add further uncertainty. Woodward et al. found that the healthcare industry exhibits a countercyclical relationship with unemployment: when overall unemployment in the economy decreases, healthcare employment tends to increase. This pattern was observed during the 2008 Great Recession in the U.S., when overall employment fell by 6.9% (approximately 7.8 million jobs), yet healthcare employment increased by 6.6% (approximately 850,000 jobs) [17]. However, it remains uncertain whether the observed effects on healthcare employment are primarily due to recruitment issues, further exacerbating the uncertainty surrounding female employment in the sector.

4. Analysis of challenges faced by female workers during the economic downturn

4.1. Macroeconomic factors

In general, the lockdown has had a disproportionate influence on women employed in the service sector, leading to what is referred to as the "she-cession." This highlights that women face greater

challenges in securing employment compared to men, as evidenced by a larger decline in female labor force participation, analogous to the concept of a "he-cession." In the United Kingdom, instances of a "he-cession" are rare, as female workers benefit from stronger labor rights and social security protections supported by government policies. By contrast, the emergence of "she-cession" cases in the United States has been largely attributed to excessive family responsibilities. The dual burden of workforce participation and caregiving often falls on women, thereby compelling them to organize and manage full childcare responsibilities.

In the 2008 financial crisis, often considered as a "he-cession," merely about 8% of countries experienced a recession primarily affecting male employment. In contrast, the sudden spread of the the coronavirus has had serious consequences for female-dominated industries, including services, tourism, and healthcare. According to labor force and unemployment statistics, nearly two-thirds of the sampled countries experienced recessionary conditions. Bluedorn et al. observed that women make up a higher proportion of the workforce in female-dominated industries, which are directly impacted by the virus and experience an elevated childcare burden in the course of the pandemic [18]. Furthermore, due to school closures and lockdown measures, women generally face a higher risk of layoffs, particularly as many are employed in short-term or part-time positions.

4.2. Social factors and role congruity

In addition to experiencing economic losses, female workers are burdened by entrenched traditional social norms. Triana et al. explained the concept of role congruity, which occurs when individuals' behaviors in stereotypically male or female roles conflict with their own identity, thus leading them to feel abnormal or even receive negative feedback, as observed in female leaders who experience criticism and prejudice in professional settings [19]. In society, roles and expectations are shaped by factors like group membership, occupational status, or personal reputation, a process conceptualized in role congruity theory, which derives from role theory and social role theory. Specifically, role theory posits that gender roles exhibit social differences, and individuals acquire corresponding role expectations through experience. Besides, social role theory further suggests that gender differences arise from the social division of labor, which, through psychological and social mechanisms, affects men's and women's behaviors at work to conform to gender-typical roles and subsequently shapes their corresponding traits [19].

The maternal role, frequently undertaken by women, carries considerable family and childcare obligations [20]. After childbirth, women often shoulder a greater share of household labor. Past studies in South Korea showed that wives dissatisfied with their husbands' share of housework have a 2.65 times higher incidence of suicidal ideation than men. The social pressure associated with the maternal role also affects career development: women with children generally earn less than their childless counterparts because parental leave and the need to care for preschool-aged children limit career mobility. Mothers often choose family-friendly, home-based, or part-time positions, which typically offer lower salaries but greater flexibility [21]. Gender remains a significant factor in explaining work-family inequality.

Women with higher education and professional experience may face reduced career mobility after childbirth. This phenomenon is primarily influenced by two factors: first, the lack of external support systems, such as limited childcare services and policy support; second, traditional societal expectations of the maternal role, which place additional pressure on women to balance family and career responsibilities [20]. In the northeastern U.S., radiology remains a male-dominated field [5]. In clinical and private healthcare settings, female staff may encounter gender bias from colleagues and patients, including judgments based on appearance or gender. Such phenomena constitute

systemic gender discrimination and further increase the pressures women face in professional environments [5].

4.3. Enterprise factors

Based on prevailing social and economic activities and expected economic trends, companies adopt diverse strategies to minimize costs and maintain operational stability. The coronavirus pandemic in 2022 restricted German companies from conducting on-site employee training, hence leading to the disruption of company-sponsored training programs. In response to adverse economic conditions, companies often cut costs and reduce additional support, like training activities, due to operational uncertainties, in order to maintain short-term production capacity. The pandemic has intensified the workload of female workers, Müller noted, encompassing both expanded childcare responsibilities and additional training requirements [22]. Companies are implementing online work models, forcing employees to use digital media for training and work, which requires a high level of digital literacy and education. This has led to changes in women's working hours, demanding greater adaptability and time management skills, and increasing their workload and stress. Besides, online training may reduce the time women can spend on childcare and family duties.

5. Strategies and suggestions

5.1. Country level

Adequate financial support and the implementation of strategic policies play an important role in economic development. In China, analysis based on the "Four Trillion Package" indicates that every RMB 100,000 invested can create 2.2 to 3.4 jobs, corresponding to a cost of 29,411 to 45,454 CNY (approximately 4,237 to 6,549 USD) per job-year [23].

In response to the global economic uncertainties of 2008, substantial support has been provided to China's local economies through various measures designed to boost domestic demand and ensure stable economic growth [23]. A fiscal stimulus package totaling around RMB 4 trillion (around USD 588 billion) was implemented to promote economic development through increased public expenditure. The funding focused on seven key areas: infrastructure development, ecological and environmental protection, technological innovation, education investment, healthcare services, and post-disaster recovery and reconstruction. Among various projects, support for the tertiary sector (services) achieved notable results. In addition, fiscal measures have had a positive effect on employment in private enterprises, stimulating the local labor market. As such, fiscal interventions and policy measures play a crucial role in promoting employment, helping to maintain workforce stability and support career development during periods of economic adjustment.

5.2. Enterprise level

Increasing female employment can begin with corporate recruitment systems. A prerequisite for preventing discrimination is the development of effective countermeasures. For example, four types of personal information, including the applicant's name, address, university background, and professional affiliation, are removed during the resume and cover letter screening stage [24]. Discrimination in the labor market is widespread, as applicants with white-sounding names are 50% more likely to be called for an interview than those with names associated with other racial groups. Employment studies have shown that applicants with underrepresented racial identifiers, such as names commonly associated with African Americans, Asian Americans, or other non-white groups,

receive 30% to 50% lower call-back rates when submitting identical resumes [24]. This indicates that implicit resume bias may occur during the initial stage of recruitment. In psychology, implicit bias is defined as the tendency of humans to rely on observed individuals and phenomena to accelerate the evolution of cognitive mechanisms, thereby improving processing efficiency.

5.3. Women's perspective

Developing internet and digital skills is essential for women's career advancement. However, limited educational opportunities and restrictive cultural norms continue to constrain women's participation in the digital field. In Africa, women's internet access is 17.1 percentage points lower than men's, while in Europe, usage rates are 80.1% for women compared to 85.1% for men. Beyond access, insufficient digital skills also create barriers. In Brazil, lack of competencies rather than cost is the primary factor preventing low-income groups from using the internet. Globally, women are 25% less likely than men to use job search platforms or master basic digital tools such as spreadsheet formulas. This limits their employment prospects and opportunities for skill acquisition. To close this gap, policies must enhance women's digital training and increase access to devices and internet services [25].

6. Conclusion

Based on data from global international organizations and relevant literature in social science and economics, this study reveals that the economic downturn triggered by the 2020 pandemic was more severe than the 2008 financial crisis. Evidence shows that workers in the tertiary sector were particularly affected, with women representing a disproportionately high share. In addition, women in the workplace still experience disadvantages related to gender inequality, bias, and stereotypes. And it further indicates that women face multiple challenges during economic downturns. Studies of nursing organizations show that women are not only subject to workplace harassment and gender stereotypes, but bear additional responsibilities as mothers. They tend to occupy low-paying, less visible service positions and at the same time bear the responsibilities of childcare and household management. The combined pressures of work and family life inevitably affect their mental health. Although employment support policies in China can alleviate unemployment among some women, these measures are generally short-term. Moreover, the study highlights the need to pay particular attention to female employees in the healthcare and hospitality sectors of the tertiary industry. Doing so can reduce the risk of organizations being perceived as unfair or lacking care, while also enhancing organizational reputation, workplace culture, and overall industry influence.

However, there are limitations. The conclusions are primarily based on secondary data and literature, which suggests that women were most affected by the economic downturn. In addition, limited research makes it difficult to establish a definitive link between the pandemic-induced downturn and female unemployment. Future studies should incorporate more interviews and case analyses, focusing especially on how women coped with unemployment and inequality during the financial crisis, in order to more accurately and convincingly reflect women's vulnerabilities in society.

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