# Assessing the Impact of Maternal Leave Policies on Women's Employment in European Countries

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#### Abstract

Considering the negative influences brought by COVID-19 on the economy, many countries have been experiencing a persistent increase in unemployment rates. It is both timely and crucial to investigate employment rates, with a particular emphasis on the women's employment rate. This study investigates the impact of maternal leave policies in Europe on women's employment. This research uses data on women's employment rate, maternal leave duration, and other control variables from Eurostat spanning from 2009 to 2022 and employs the OLS model for regression analysis. The results suggest that maternity leave policies have a negative effect on women's employment rates. We further found that for countries with positive economic growth rates, the impact of maternal leave policies on women's employment rates is negative and significant, while this negative association is not significant in countries with negative economic growth.

## **1** Introduction

### 1.1 Background

Maternal leave, as a crucial family-friendly work policy, has played a critical role in various aspects related to the health and welfare of the mother, newborn, and the entire family. The history of maternity leave in Europe has progressively changed over years, with most European countries offering generous maternity leave provisions (Canaan et al., 2022; Castro-García & Pazos, 2016;

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Haas, 2003; Michoń, 2008; Jurviste et al., 2016; Jurviste et al., 2019; Oláh, 2015; Robila, 2012; Son & Böger, 2021). The first implementation of the maternity leave policy traces back to Germany, with the enactment of the "Act for the Protection of Women and Young Persons at Work" in 1878 (Alewell & Pull, 2000). This legislation sets a precedent by allowing women to take paid leave from work for eight weeks post-childbirth. This groundbreaking policy serves as a model for other European countries to follow and establish their own maternity leave. Subsequently, many European countries also introduced maternity leave policies, such as France, which enacted an eight-week maternity leave in 1909, and the UK, which passed a two-week maternity leave in 1911.

With the elevation of women's status in society and attention to gender equality, more countries began to implement maternity leave policies and gradually extended the duration of maternity leave. For example, Sweden enacted a 12-week maternity leave in 1955, which gradually increased to the current 16 months; Canada also started implementing maternity leave policies in 1971, with the recent leave duration being 18 months; Sweden offers 480 days of parental leave, which can be shared between both parents (Baker & Milligan, 2008; Gutierrez-Domenech, 2005; Son & Böger, 2021). In general, the evolution of maternity leave is tightly related to the Industrial Revolution, the women's rights movement, and the development of workers' welfare. The implementation and evolvement of maternal leave reflect a broader shift towards promoting gender equality and shared parenting responsibilities.

Constrained by traditional gender norms, women have typically been the ones shouldering the full responsibility of childbirth and child-rearing. Nonetheless, welcoming a new life and its subsequent family responsibilities should be undertaken by both parents jointly and equally (Borgmann et al., 2019; Casey & Corday, 2008; Ciccia & Verloo, 2012; Kalwij, 2010). Today, many European countries are not just providing maternity leave but also focusing on paternity and parental leave: for example, the European Directive on work-life balance for parents and carers, implemented in 2019, introduces paternity leave, paid parental leave, and carers' leave, attempting to improve gender balance in family responsibilities (Foubert & Hendricks, 2021).

The following graph (Graph 1.1) provides a direct overview of maternal leave duration among 32 European countries. The mean maternal leave in these 32 countries is 148 days, around five



Figure 1: Maternal Leave Duration

months, with a standard deviation of 71.2. Among all 32 countries, Bulgaria has the shortest maternal leave with only 45 days, while Iceland, Norway, and the United Kingdom have relatively longer maternal leave, all of which are more than 250 days. Note that although the United Kingdom has the most extended maternal leave policy, 52 weeks, it is split into "Ordinary Maternity Leave" for the first 26 weeks and "Additional Maternity Leave" for the last 26 weeks. Only the first six weeks are fully subsidized. While Europe is seen as a leader in maternity leave policies, there is still significant variation between countries, and challenges remain. The effectiveness of these policies often depends on factors such as wage replacement rates, parents (especially fathers') ability to take leave, and cultural norms around work and parenting.

## 2 Problem Statement

Childbirth is widely recognized as a physically and emotionally strenuous process. Potential complications during childbirth, postpartum depression, breastfeeding responsibilities, and new-born care necessitate a period of rest and recovery, which makes maternal leave a vital and indispensable phase for every new mother at working ages (Avendano et al., 2015; Dagher et al., 2014; Strang & Broeks, 2017). Theoretically, maternity leave policies are supposed to promote women's

employment as it provides women with adequate time to recover themselves and adjust to their new familial responsibilities after childbirth.

However, in some circumstances, such protective policies may hurt employment opportunities for women, as employers might prefer to hire men instead who do not require maternity leave and thereby avoid the costs and administrative burden (Busby, 2000; Kocourková, 2002). Furthermore, after a long period of maternity leave, it may be challenging for some women to re-enter the workforce due to updated technology, new industry standards, or other changes in the job market. Affected by the COVID-19 pandemic, the global employment situation has become more severe, and maternity leave policies could also potentially impact women's career progression. During maternity leave, women might miss promotion and career development opportunities, which could affect their future work and income. Therefore, considering the benefits and negative implications of maternal leave, it is worthwhile to study the impact of maternity leave policies on women's employment rates in European countries.

Therefore, this study quantified maternity leave policies and examined women's employment rates in 32 European countries based on the data from Eurostat spanning from 2009 to 2022. The independent variable is the duration of maternal leave in different countries; the dependent variable is the women's employment rate. The OLS regression analyses were done to see the association between women's employment and maternal leave duration. Regression analyses on control variables, including Gross Domestic Product (GDP), economic growth, wage growth, and birth rates, were also conducted to avoid the impacts of confounding factors and reduce biases.

### 2.1 Research Questions

This study proposes three research questions as follows:

1. Is the impact of maternity leave policies on women's employment rates negative?

2. Is the impact of maternity leave policies on women's employment rates negative in countries with strong economic growth?

3. Is the impact of maternity leave policies on women's employment rates negative in countries with weak economic growth?

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### 2.2 Significance of study

Thus, the effects and consequences of maternity leave policies have continuously been a complex topic. From a theoretical perspective, this research, investigating the impact of maternity leave policies on women's employment rates, effectively displays the interaction between policy and socio-economic factors. This thereby leads to a deeper understanding of gender issues in employment and the labor market. Furthermore, this research provides a solid theoretical basis for public policy formulation, helping policymakers to adjust and formulate better policies related to female employment. Thus, from a theoretical perspective, research is important to promote gender equality and socio-economic development.

From a practical standpoint, researching the impact of maternity leave policies on women's employment rates effectively offers policymakers suggestions and guidance on optimizing maternity leave policies. This research reveals the effects of factors such as the duration of maternity leave, salary compensation, and flexible work arrangements on women's employment rates and provides corresponding policy recommendations. Implementing more flexible and adaptable maternity leave policies can help women better balance work and family life and improve both the employment rate and employment quality of women.

#### 2.3 Scope of Study

In this study, we adopted data spanning from 2009 to 2022 from Eurostat, including 32 countries across Europe: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, North Macedonia, Turkey. We attempted to investigate the relationship between women's employment rate and maternal leave duration in these 32 countries. Data on the Gross Domestic Product, economic growth, wage growth, and birth rate of these 32 countries were also collected as control variables.

## **3** Literature Review

### **3.1 Empirical Review**

#### 3.1.1 Positive relationship

Numerous pioneering research has indicated that a well-designed maternal leave policy yields a range of advantages for women, including improved physical and mental health, better child care and child development, breastfeeding success, economic security, and reduction in gender inequality (Avendano et al., 2015; Staehelin et al., 2007; Wall & Escobedo, 2012; Dagher et al., 2014; Mauricio et al., 2015). For example, considering the physical health effects brought by maternal leave policies, the study done by Staehelin et al. (2007) demonstrated a positive correlation between the duration of maternal leave, improvements in mothers' health, and breastfeeding. They further suggested that extended periods of maternal leave were also tightly connected with reduced rates of perinatal, neonatal, and post-neonatal mortality and overall child mortality. Furthermore, in the research "The long-run effect of maternity leave benefits on mental health: Evidence from European countries," Avendano et al. found that maternal leave not only enhanced women's physical well-being after giving birth but also provided long-term benefits on both physical and mental health. The researcher indicated that comparing the late-life depression scores of women who had taken maternity leave during their first child's birth to those who had not, women who had maternity leave displayed a lower likelihood of exhibiting adverse mental health effects such as depression.

Apart from both short-term and long-term health benefits brought by maternal leave, this social welfare policy also plays a crucial role in promoting gender equality and fostering social fairness (Castro-García & Pazos, 2016; Ciccia & Verloo, 2012; Casey & Corday, 2008). Providing incomes and job protections during this period, maternal leave thereby empowers women and makes them less financially dependent on their partners or social safety nets (Van Belle, 2016). Furthermore, although many studies proposed that previous maternal leave policies reinforced the stereotypical social gender expectations, men being as breadwinners and women as caregivers, in recent years, European countries have increased emphasis on shared parental responsibilities by allowing parents to split leave time after the birth of a child (Castro-García & Pazos, 2016). Note that parental

leaves are designed to promote equal take-up between new fathers and mothers. Nevertheless, research suggested that women still take the majority of the paid leave time, and men mostly only take the nontransferable highly paid leave (Casey & Corday, 2008; Castro-García & Pazos, 2016).

In addition to the humanitarian justifications for implementing maternity leave, this policy also yields various economic advantages. Maternal leave policies can enable women to continue their careers after childbirth. By ensuring job protection during leave, women are able to return to their careers without fear of losing their positions due to motherhood. Without appropriate maternity leave policies, women might leave their workplaces to care for newborns, thereby negatively impacting the labor market. Therefore, suitable maternity leave policies can lower the quit rate of women after childbirth, reducing social costs (Seibicke et al., 2020; Dearing, 2016). From a firm-level perspective, compared to companies that do not provide maternity leave, those that do are more likely to retain qualified female employees, thereby improving the company's return on investment (Kelly & Dobbin, 1999).

In conclusion, maternity leave policies play a dual role in fostering new mothers' health and assuring their ongoing involvement in the labor force. This ultimately leads to the empowerment of women and the promotion of gender equality.

#### 3.1.2 Negative relationship

Although the advantages of maternity leave policies are substantial and evident, it is vital to take into account the potential challenges and negative consequences associated with these policies, including perpetuating gender stereotypes, discrimination in job opportunities, career stagnation, etc. (Canaan et al., 2022; de la Corte Rodríguez, 2018; Genre et al., 2010; Low & Sánchez-Marcos, 2015; Pronzato, 2009).

Considering the fact that parental leaves are significantly taken by women only, this policy may exacerbate the stereotypical perceptions of women. Specifically, if maternal leave policies are not balanced with paternal leave policies, they may inadvertently reinforce traditional gender roles, with women as caregivers and men as breadwinners (Busby, 2000; Kocourková, 2002; Ruhm, 1998). Second, employers, especially in small businesses, might prefer to hire men who do not require maternity leave to avoid the costs and administrative burdens associated with maternity

leave. According to the research done by Dearing (2016), she demonstrated that the length of maternal leave adversely impacted the employment outcomes, such as gender-based job segregation, a decrease in wage levels, and fewer job-related training opportunities for women. Not only causing a decrease in employment opportunities, but maternal leave policies may also lead to career stagnation and underemployment of women (Baker & Milligan, 2018). During maternity leave, women may miss potential promotions or high-impact projects, negatively impacting their career trajectory. In addition, the length of maternity leave and the rapidly evolving nature of specific jobs result in a skills gap for women upon their return, making it challenging to regain competitiveness in the workplace. Absence from the workplace might reduce opportunities for strategic networking, mentorship, and fostering relationships essential for career enhancement. A latent bias or stigma might exist against working mothers and pregnant women, which could unjustly impede career progression. Also, many women are channeled into "mommy tracks" or roles viewed as more accommodating for family life, but that may offer limited prospects for advancement after giving birth (Casey & Corday, 2008)

Therefore, although maternal leave policies are designed to support and protect pregnant women and working mothers, it may inadvertently lead to a decrease in employment opportunities and career promotions for women.

### **3.2 Definition of Key Terms**

#### 3.2.1 Maternal Leave Policy

Maternity leave policies refer to paid or unpaid leave mechanisms governments or employers provide for women to rest and care for newborns after childbirth (Haas, 2003). These policies aim to protect the rights and interests of female workers, helping them recover physically and mentally after childbirth while caring for and raising their newborns. Maternal leave is often complemented by other forms of leave, such as paternal leave, sick leave, or parental leave.

There is a significant disparity in maternity leave policies across different countries and regions, covering aspects such as leave duration, salary compensation, and the responsibilities of governments and employers. Developed countries and regions generally have relatively well-established

and more generous maternity leave policies, usually stipulating longer leave durations, offering higher wage compensations, and being borne by both governments and employers. On the other hand, the maternity leave policies in some less developed countries and regions may be rudimentary or incomplete, often lacking sufficient safeguards and welfare measures, leading to more serious professional and economic difficulties for women after childbirth.

#### 3.2.2 Maternal Leave Duration

Maternal leave duration refers to the length of time that women are legally entitled to be absent from work around the time of childbirth, which includes both pre-birth and post-birth leave (Deven & Moss, 2002; Escobedo & Wall, 2015; Jurviste et al., 2016). Within the maternal leave duration, women continue to receive their salary or a certain percentage of it. Typically, in European countries, women are eligible for fully compensated maternal leave that commences a few weeks before the expected date of childbirth and continues for certain weeks post-delivery. The duration of maternal leave varies significantly for different countries (Van Belle, 2016).

#### 3.2.3 Women's Employment Rate

The women's employment rate refers to the proportion of women engaged in the workforce among the employed population (Gutierrez-Domenech, 2005). It measures the degree to which women participate in the labor market in a country or region. The women's employment rate level reflects the differences in the degree of female labor participation in a country or region. A high women's employment rate usually indicates high levels of education among women, stable economic conditions, diverse employment opportunities, and factors conducive to women's career development in that country or region. Conversely, a low women's employment rate may imply gender discrimination in employment opportunities and labor markets or other social and cultural barriers faced by women in that country or region.

### 3.3 Research Gap

Most studies are conducted through survey questionnaires as their primary methodology, and very few use macroeconomic data for research. These surveys typically capture individuals' experiences and provide valuable insights into the effects of maternal leave policies on employment changes. However, such a methodology could not capture the larger, systematic impacts of the policy. Macro-level data, including indicators such as Gross Domestic Product (GDP), national employment rate, and wage level, could effectively shed light on broader societal trends and overarching economic implications of maternal leave policies. In addition, a large portion of research on maternity leave was done many years ago. Considering the progression and adaptations of these policies over time, such as modifications in leave duration and the transition from maternity to parental leaves, it is pressing and necessary to conduct up-to-date studies to evaluate the influence of maternity leave on employment rates across a more extended time frame. Therefore, it is necessary to conduct macroeconomic-level research focusing on women's employment rate and maternal leave duration.

### **3.4 Hypotheses Development**

#### 3.4.1 Maternal Leave Policy and Women's Employment Rate

According to early literature, maternal leave allows women to recover from childbirth and adjust to their new roles as mothers (Casey & Corday, 2008; Castro-García & Pazos). By supporting the health and well-being of female employees who just transitioned into motherhood, maternal leave ensures that women can return to work in good health status, supporting continued employment. In addition, maternal leave provides financial support and job protection before and after childbirth that encourages and incentivizes women to stay in the labor force (Seibicke et al., 2020; Dearing, 2016).

However, considering the heavy administrative and financial costs brought by maternal leaves for firms, employers might be unwilling and less likely to hire women at reproductive age or planning to conceive (Canaan et al., 2022; de la Corte Rodríguez, 2018; Genre et al., 2010). Moreover, asides from hurting employment, maternal leave may also cause underemployment and career stagnation due to missed progression opportunities, skills deficit, and workplace segregation (Low & Sánchez-Marcos, 2015; Pronzato, 2009).

Furthermore, in societies where women are often the primary caregivers, a higher birth rate may mean that more women are taking maternity leave in a given year, leading to a temporary decrease in women's employment rate due to maternity leave and childcare responsibilities. However, the relationship between these variables is complex and depends on several other factors. For example, higher levels of female employment might coexist with higher birth rates in societies with solid labor market protections for women, generous parental leave policies, affordable childcare, and cultural acceptance of working mothers. Here, employment provides economic security that can facilitate family formation, while supportive policies and services help women balance work and family responsibilities. Therefore, we also attempted to investigate the impact of the birth rate on women's employment rate in this study.

Based on the above consideration and discussion, the study proposed the following hypothesis:

H1:Length of maternity leave has a negative impact on the employment rate of unmarried women.

## 3.4.2 Maternal Leave Policy and Women's employment rate in Countries with Different Economic Growth Rate

The main objective of this research was to examine the correlation between maternal leave and women's employment across various European countries. Thus, economic growth, as a factor that typically causes direct effects on employment rates, emerged as a vital factor to consider.

In a study conducted by Gutierrez-Domenech (2005), the researcher emphasized that whether women can successfully return to work, post-childbirth significantly depended on the economic conditions and governmental regulations. In prosperous economic conditions, there would be more job opportunities, increasing the likelihood of finding suitable employment after taking maternal leave. On the other hand, during the economic downturn, women would face more challenges in securing employment or finding new jobs.

Moreover, economic growth plays a significant role in informing policy decisions (Prpic, 2017). Policymakers attempted to balance the goal of supporting new mothers with the economic realities of providing paid leave. In economies experiencing substantial growth, governments may be more willing and able to institute generous and longer maternal leave policies. On the contrary, employment rates generally decline during periods of economic contraction or stagnation, where GDP growth is slow or negative. In these circumstances, businesses might be more cautious about hiring or may even need to downsize, leading to fewer opportunities for both existing employees and people wanting to re-enter the labor force. Consequently, this dynamic between macroeconomic conditions and employment rates underscores the importance of economic health in supporting and interplaying with labor market outcomes. Furthermore, considering the macro-level factors, we also assumed that higher wages could serve as a stronger incentive for people to enter or stay in the workforce, thereby potentially increasing the employment rate. Wage growth also serves as a sign of a strong economy. When the economy performs well, businesses usually see increased demand for their products or services, which in turn leads to more hiring and wage increases. In such a case, wage growth and employment rates can rise together.

Furthermore, the relationship between maternal leave and macro-economic performances could go both ways. While economic performances can influence the enactment and implementation of maternal leave policies, these policies themselves could also have huge impacts on the national economy. For example, a well-designed maternal leave policy would successfully contribute to higher female labor force participation, boosting economic growth. Therefore, a comprehensive understanding of the correlation between maternal leave and women's employment in European countries requires carefully considering broader economic performances and circumstances. Further research should be done to see the dynamic interplay between economic growth, women's employment rate, and the design of maternal leave policies.

Thus, we, therefore, proposed the following two hypotheses:

H2: The impact of maternal leave duration on women's employment rates in countries with positive economic growth is negative.

H3:The impact of maternal leave duration on women's employment rates in countries with negative economic growth is negative.

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### 3.5 Conceptual Framework of the Study

The following graph refers to the conceptual framework of this study. IV stands for the independent variable, maternal leave duration. DV stands for the dependent variable, women's employment rates. CV are control variables, including GDP, Economic growth, birth rate, and wage growth rate. We assumed that both IV and CV would impact the women's employment rates in target countries.

## 4 Research Methodology

#### 4.1 Introduction

This chapter presents the research methodology, including model specification, variables, and data selection, preparing for the subsequent regression analysis.

### 4.2 Model Setting

This study uses panel data and the Ordinary Least Squares (OLS) model, with individual and time effects being fixed, aiming to enhance the reliability of the research. OLS model is suitable for examining linear relationships between variables, for example, potential linear relationship between maternal leave duration and women's employment rate. Panel data, combining both cross-sectional and time series data, effectively provides observations over multiple time periods for 32 different countries. It also allows us to study the dynamics between maternal leave duration and

women's employment rate with more reliable and comprehensive results.

$$Q_{it} = a_0 + a_1 W_{it} + x_2 L_{it} + x_3 G_{it} + x_4 R_{it} + x_5 B_{it} + x_6 N_{it} + b_i + C_i + d$$
(1)

In the formula,  $W_{it}$  is the dependent variable, representing women's employment rate;  $L_{it}$  is the independent variable, representing the natural logarithm of maternal leave duration;  $L_{it}$  and  $R_{it}$ denote the natural logarithm of gross domestic product (GDP) and economic growth;  $B_{it}$  refers to birth rate;  $N_{it}$  refers to wage growth rate.  $G_{it}$ ,  $R_{it}$ ,  $B_{it}$ ,  $N_{it}$  are the control variable.  $b_i$  represents individual effects;  $C_i$  represents time effects; d is the random disturbance term.

#### 4.3 Measurement of Variables

#### (1) Dependent variable:

Women's employment rate: the percentage of women at working-age who are currently employed, denoted by Womenrate.

(2) Independent variables:

Maternal Leave Duration (in the natural logarithm form): length of time a woman is legally permitted to be absent from work around the time of childbirth with full compensation, denoted by Lnx.

(3) Control variables:

Gross Domestic Product (GDP in the natural logarithm form): total value of all final goods and services produced within a country's borders overtime, denoted by Lngdp.

Economic Growth:increase in the value of the goods and services produced by an economy over time with inflation adjustment, denoted by Rgdgp

Birth Rate: the number of live births per 1,000 people within a year, denoted by Birth

Wage Growth Rate: percentage increase in wages employees annually, denoted by Dlnwage

Control variables, including Gross Domestic Product (GDP), economic growth rate, wage growth rate, and birth rate, were also collected from Eurostat. We were curious to investigate how these macro-level control variables influence the women's employment rate. First, GDP and

#### Table 1: Description of Variables

Туре	Name	Symbol	Description
DV	Womanrate	W	Women's employment rate
IV	LnX	L	The Natural Logarithm of Maternal Leave Duration
	Lngdp	G	The Natural Logarithm of Gross Domestic Product (GDP)
CV	Rgdgp	R	Economics Growth
	Birth	В	Birth Rate
	DLnwage	Ν	Wage Growth Rate

\*Source: Eurostats (2021)

economic growth represent macro-level factors that directly influence national employment rates. In an economic environment marked by rising GDP and rapid economic growth, employment rates, including women's employment, tend to increase. This increase is primarily due to the proliferation of job opportunities and business expansion efforts in a thriving economy.

### 4.4 Data Selection and Collection

This research employs data acquired from Eurostat, covering 2009 through 2022. The duration of 13 years offers a considerable amount of data for analysis. Eurostat, the statistical agency of the European Union, provides comprehensive statistics on various aspects, including economy, demography, society, and environment. The study investigates and analyzes women's employment rates, which serve as the dependent variable, and the length of maternity leave, the independent variable, across 32 European countries. Out of the 44 European countries, 32 were selected for this study due to the unavailability of adequate data for the other countries. 32 countries include Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, North Macedonia, Turkey. The chosen countries represent a broad spectrum of economic performance, ranging from those with positive economic growth to those experiencing poor economic growth.

In sum, we selected 32 European countries' maternal leave duration as our independent variable and their corresponding women's employment rate as our dependent variable. GDP, economic growth rate, wage growth rate, and birth rate as our control variables. All data were extracted from Eurostat, spanning from 2009 to 2022.

### 4.5 Data Analysis Techniques

The data analysis technique used in this study is descriptive statistics and regression analysis. The descriptive statistics summarize the main features of the relationship between women's employment rate, maternal leave duration, and other control variables. The descriptive statistics analysis involves the mean, standard deviation, maximum, and minimum values of the independent, dependent, and control variables. This allowed for a comprehensive understanding of the variables' central tendency, variability, and range.

Regression analyses between the dependent variable, independent, and control variables were done to see the correlations. Regression analysis allows for hypothesis testing, as it assesses the statistical significance of the coefficients and the overall model fit.

### 4.6 Data Diagnostics Technique

The diagnostic techniques are robustness tests and heterogeneity analysis. Conducting a robustness test is an essential aspect of statistical analysis that helps ensure the results' reliability and validity. The robustness test verifies whether the outcomes of our analysis are not sensitive to changes in the model specification, data set, or estimation technique. This research conducted robustness tests by eliminating extreme values of women's employment rate and maternal leave duration. Therefore, by running a robustness test that removes the extreme values of women's employment rate and maternal leave duration, we ensure that the conclusions drawn from the analysis are not overly influenced by a small number of outlier data points. Furthermore, it assures that the findings are reliable, applicable to the majority of cases, and not merely an artifact of extreme values in the data.

We also segmented the dataset based on even and odd years to further test the study's robustness. By dividing the data into two subsets, we can thereby examine whether the observed relationships and patterns hold consistently across different time periods. In addition, segmenting the dataset based on even and odd years allows for comparing the findings between these two subsets, which helps identify any potential temporal variations or biases in the results. If the relationships between women's employment rate and maternal leave duration remain consistent and statistically significant in both subsets, it provides evidence of the robustness of the findings, indicating that the observed effects are not driven by specific years or temporal fluctuations.

The heterogeneity analysis was examined by splitting the dataset based on positive economic growth countries and negative economic growth countries. By dividing the dataset into subsets based on economic growth, we can then examine whether the relationship between maternal leave policy and women's employment rate varies according to the economic conditions of different countries. This method enables us to see if the effects of maternal leave policies differ between countries experiencing different economic conditions. Furthermore, it provides insights into how economic growth may moderate the impact of maternal leave policy on women's employment, highlighting whether the relationship is consistent across all countries or if it varies significantly.

## 5 Results and discussion

### 5.1 Introduction

This chapter presents and explains descriptive statistics, regression analysis, robustness tests, and heterogeneity tests.

### 5.2 Descriptive Statistics

Table 4.1 presents the descriptive statistics for the dependent and independent variables of the study. Our dependent variable, women's employment rate ( $W_{it}$ ), has a mean value of 0.642, suggesting that slightly less than two-thirds of women in these countries are employed. The standard deviation is 0.151, suggesting a small variation in women's employment rate across all European countries. Women's employment rate fluctuates from a low of 0.006 to a high of 0.845. Our independent variable, the natural logarithm of maternal leave duration ( $L_{it}$ ), has a mean of 4.9, with a standard deviation of 0.381, ranging from 3.829 to 5.841. The statistics of independent variables imply that while the average maternity leave duration (when transformed back from the natural logarithm) is around 134 days ( $e^{4.9}$  equals to approximately 134), duration varies largely across different countries, where the shortest duration is around 46 days ( $e^{3.829}$ ) and the longest is around

Table 2:	Descriptive	Statistics
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Variable	Obs	Mean	Std. Dev.	Min	Max
womanrate	284	.642	.151	.006	.845
lnx	284	4.9	.381	3.829	5.841
lngdp	284	4.746	.141	4.362	5.359
rgdpg	284	.023	.037	113	.244
birth	284	.035	.117	.011	.745
dlnwage	252	.045	.046	151	.204

343 days ( $e^{5.841}$ ).

Furthermore, Table 4.1 also outlines the statistical descriptions of our control variables, including GDP ( $G_{it}$ ), Economic Growth ( $R_{it}$ ), Birth Rate ( $B_{it}$ ), and Wage Growth Rate ( $N_{it}$ ). GDP ( $G_{it}$ ) has an average of 4.746, showcasing that the countries selected have relatively good economic status. A standard deviation of 141 signifies a certain level of variability in the economic size of these countries. The GDP ranges from 4.362 to 5.359, a considerable variation in the economic scale of the countries. Economic Growth ( $R_{it}$ ) has an average of 0.023, indicating that, on average, economies have positive growth rate. However, a standard deviation of 0.037 and a range from -0.113 to 0.244 imply significant fluctuations in economic growth between these countries. Birth Rate ( $B_{it}$ ) has an average of 0.035, suggesting relatively low fertility across these countries. With a standard deviation of .117 and data spanning from 0.011 to 0.745, it demonstrates that the birth rate and fertility rate vary significantly across different countries. The Wage Growth Rate ( $N_{it}$ ) exhibits an average of 0.045, showing that the overall wage growth is positive. A standard deviation of 0.46 and a range from -0.151 to 0.204 indicates that wage growth varies greatly across these countries, with some experiencing wage deflation and others seeing wage increases.

### 5.3 Regression Analysis

From Table 4.2, the OLS regression analysis suggests that the impact of maternity leave duration on women's employment rate is negative and significant. For every 1 unit increase in maternity leave duration, the women's employment rate decreases by 0.316 units (p<0.01). This indicates that maternity leave policies have not promoted women's employment rates but instead reduced women's employment and job opportunities. This result may suggest potential trade-offs between social welfare policies and women's employment outcomes.

Regarding control variables, based on the regression analysis of GDP and women's employment rate, we found that for every unit increase in GDP, women's employment rate increases by 0.133 units (p<0.01), suggesting a significant and positive relationship between women's employment rate and countries' GDP in Europe. The regression analysis on economic growth and women's employment rate suggests that for every unit increase in economic growth, women's employment rate decreases by 0.043. This negative association is not significant and seems to be counterintuitive. However, it could be that during periods of rapid economic growth, traditionally male-dominated sectors expand faster, potentially hurting women in the labor market. The regression analysis on birth rate and women's employment rate suggests that for every unit increase in birth rate, women's employment rate decreases by 0.632 (p<0.1). This negative and significant association might be due to an increase in childcare demand. Lastly, the regression analysis on wage growth suggests that for every unit increase in wage growth rate, women's employment rate increases by 0.087 (p<0.01). With wages growing, women are incentivized to join or remain in the workforce after childbirth.

Note: This table determines the impact of maternal leave duration on women's employment rate using the OLS model. womenrate denotes women's employment rate. Inx denotes the natural logarithm of maternal leave duration. Ingdp denotes the natural logarithm of GPD. rgdpg denotes the economic growth rate. birth denotes the birth rate. D.Inwage denotes the wage growth rate.

#### 5.4 Robustness Test

#### 5.4.1 Removing Extreme Values of Women's Employment Rate

By eliminating the extreme values or outliers of women's employment rates, we test the robustness of the OLS regression analysis on maternal leave duration and women's employment rate. Aligning with the above OLS regression analysis, Table 4.3 suggests that the impact of maternity leave duration on women's employment rate is negative and significant. For every unit increase in maternal leave duration, women's employment rate decreases by 0.315 (p<0.01), implying that long maternal leave duration indeed hurts women's employment rate. Furthermore, the

	(1)
VARIABLES	womanrate
lnx	-0.316***
	(0.01)
lngdp	0.133***
	(0.02)
rgdpg	-0.043
	(0.05)
birth	-0.632*
	(0.36)
D.lnwage	0.087***
	(0.03)
Constant	1.563***
	(0.11)
Observations	252
R-squared	0.992
CountryFE	YES
Year FE	YES
Standard errors in parentheses	
*** p <0.01, ** p <0.05, * p<0.1	

Table 3: OLS Regression Analysis

Table 4: OLS Regression Analysis (removing extreme values of women's employment rate)

	(1)
VARIABLES	womanrate
lnx	-0.315***
	(0.01)
lngdp	0.132***
	(0.02)
rgdpg	-0.043
	(0.05)
birth	-0.625*
	(0.36)
D.lnwage	0.078***
	(0.03)
Constant	1.566***
	(0.11)
Observations	252
R-squared	0.992
CountryFE	YES
Year FE	YES
Standard errors in parentheses	
*** p<0.01, ** p<0.05, * p<0.1	

regression test on control variables after removing extreme values of women's employment rates also exhibits similar results as the above OLS regression test. The regression analysis on GDP and women's employment rate shows that for every unit increase in GDP, women's employment rate increases by 0.132 units (p<0.01). The regression analysis on economic growth and women's employment rate suggests that for every unit increase in economic growth, women's employment rate decreases by 0.043. The regression analysis on birth rate and women's employment rate suggests that for every unit increase in birth rate, women's employment rate decreases by 0.625 (p<0.1). The regression analysis on wage growth suggests that for every unit increase in wage growth rate, women's employment rate increases by 0.078 (p<0.01).

Note: This table determines the impact of maternal leave duration on women's employment rate using the OLS model after removing extreme values of women's employment rate. womenrate denotes women's employment rate. Inx denotes the natural logarithm of maternal leave duration. Ingdp denotes the natural logarithm of GPD. rgdpg denotes the economic growth rate. birth denotes

the birth rate. D.lnwage denotes the wage growth rate.

#### 5.4.2 Removing Extreme Values of Maternal Leave Duration

To improve the reliability of the study, we regard countries with maternal leave duration of more than 300 days as outliers and eliminate them when conducting the regression test. We found a similar data pattern as the above OLS analysis. Table 4.4 suggests that the women's employment rate is negatively and significantly associated with the maternal leave duration. For every unit increase in maternal leave duration, women's employment rate reduces by 0.31 (p<0.01).

Results on the control variable also show similar patterns as the above regression tests. The regression analysis on GDP and women's employment rate shows that for every unit increase in GDP, women's employment rate increases by 0.121 units (p<0.01). The regression analysis on economic growth and women's employment rate suggests that for every unit increase in economic growth, women's employment rate decreases by 0.051. The regression analysis on birth rate and women's employment rate suggests that for every unit increase in birth rate, women's employment rate decreases by 0.769 (p<0.05). The regression analysis on wage growth suggests that for every unit increase in wage growth rate, women's employment rate increases by 0.107 (p<0.01).

Note: This table determines the impact of maternal leave duration on women's employment rate using the OLS model after removing extreme values maternal leave duration. womenrate denotes women's employment rate. Inx denotes the natural logarithm of maternal leave duration. Ingdp denotes the natural logarithm of GPD. rgdpg denotes the economic growth rate. birth denotes the birth rate. D.Inwage denotes the wage growth rate.

#### 5.4.3 Segment the dataset based on even and odd years

To analyze the dataset further, we split it into odd and even years and evaluated them separately. Table 4.5 shows that the dataset exhibits extremely similar results in even and odd years. Both regression tests suggest a negative and significant relationship between women's employment rate and maternal leave duration. For every unit increase in maternal leave duration, the women's employment rate decreases by around 0.32 (p<0.01). This highlights the consistently negative impact of extended maternal leave duration on women's employment, regardless of the year.

VARIABLES	(1) womanrate
lnx	-0.315***
	(0.01)
lngdp	0.121***
	(0.02)
rgdpg	-0.051
	(0.04)
birth	-0.769**
	(0.35)
D.lnwage	0.107***
	(0.03)
Constant	1.617***
	(0.11)
Observations	244
R-squared	0.993
CountryFE	YES
Year FE	YES
Standard errors in parentheses	
*** p<0.01, ** p<0.05, * p<0.1	

Table 5: OLS Regression Analysis (removing extreme values of maternal leave duration)

Results on the control variable also show similar patterns as the above regression tests. The regression analysis on GDP and women's employment rate shows that for every unit increase in GDP, women's employment rate increases by around 0.18 units (p < 0.01). This consistent pattern reinforces the positive correlation between GDP and women's employment opportunities. The regression analysis on economic growth and women's employment rate suggests that for every unit increase in economic growth, women's employment rate decreases by 0.392 in even years and increases by 0.143 in odd years. This fluctuation might suggest that the influence of economic growth on women's employment rate could be influenced by other time-dependent factors. The regression analysis on birth rate and women's employment rate suggests that for every unit increase in birth rate, women's employment rate decreases by around 0.6. The regression analysis on wage growth suggests that for every unit increase in wage growth rate, women's employment rate increases by 0.205 (p<0.01) in even years and 0.040 in odd years. This additional analysis by segmenting the datasets based on even and odd years affirms the original conclusions while also highlighting some possible time-dependent nuances. Note: This table determines the impact of maternal leave duration on women's employment rate using the OLS model after segmenting dataset based on even and odd years. womenrate denotes women's employment rate. Inx denotes the natural logarithm of maternal leave duration. lngdp denotes the natural logarithm of GPD. rgdpg denotes the economic growth rate. birth denotes the birth rate. D.Inwage denotes the wage growth rate.

### 5.5 Heterogeneity test

Since European countries exhibit very different economic growth rates, we segmented the dataset based on positive and negative economic growth countries to investigate the impacts of economic growth on women's employment growth. Although both positive and negative economic growth countries suggest that longer maternal leave durations have a negative impact on women's employment rates, the impact of maternal leave policies on women's employment rates is not significant in countries with negative economic growth. This is because, during an economic contraction, other factors overshadow the impact of maternal leave policies on women's employment. For every unit increase in maternal leave duration in countries with positive economic growth, women's employment rate decreases by 0.330 (p<0.01).

	(1)	(2)
VARIABLES	womanrate	womanrate
lnx	-0.322***	-0.319***
	(0.01)	(0.01)
lngdp	0.179***	0.177***
	(0.03)	(0.04)
rgdpg	-0.392***	0.143**
	(0.07)	(0.07)
birth	-0.615	-0.632
	(0.47)	(0.52)
D.lnwage	0.205***	0.040
	(0.04)	(0.05)
Constant	1.384***	1.382***
	(0.15)	(0.19)
Observations	127	125
R-squared	0.995	0.992
CountryFF	VFS	VES
Vear EE	VES	VES
Standard errors in parentheses	I LS	I LS
$\frac{1}{2}$		
···· p<0.01, *** p<0.03, ** p<0.1		

Table 6: OLS Regression Analysis (segmented dataset based on even and odd years)

Regarding the control variables, for one unit increase in GDP, the women's employment rate increases by 0.190 units in countries with positive economic growth (p < 0.01). For one unit increase in GDP, the women's employment rate increases by 0.449 units in countries with negative economic growth (p < 0.01), which implies that an increase in GDP has more impact on women's employment rate in countries with poor economic performance. For one unit increase in economic growth in positive economic growth countries, women's employment rate increases by 0.142, while this association is not significant in countries with negative economic growth. This highlights that economic growth benefits women's employment more in already growing economies. The birth rate in both types of countries has a negative association with women's employment rate, while this impact is significant only in countries with negative economic growth: for every unit increase in birth rate, the women's employment rate decreases by 0.901. This result suggests that in countries with negative economic growth, the impact of an increased birth rate, which associates with more childcare responsibilities, might be more detrimental to women's employment. For both types of countries, wage growth is significantly associated with women's employment rate. In contrast, wage growth is positively associated with women's employment rate only in countries with positive economic growth: for every unit of wage growth, women's employment rate increases by 0.063 (p < 0.01). However, for negative economic growth countries, wage growth instead hurts women's employment: for one unit increase in wage growth, women's employment rate decreases by 0.859 (p < 0.01). This indicates that in economically declining countries, wage growth is likely due to inflation or cost of living increases. Thus, this might reduce women's employment opportunities, potentially due to employers' reluctance to hire at higher wage rates.

This analysis underscores how economic context significantly impacts women's employment rate, suggesting the importance of tailoring policies to the specific economic conditions of different countries.

Note: This table determines the impact of maternal leave duration on women's employment rate using the OLS model after segmenting dataset based on positive and negative economic growth. womenrate denotes women's employment rate. Inx denotes the natural logarithm of maternal leave duration. Ingdp denotes the natural logarithm of GPD. rgdpg denotes the economic growth rate. birth denotes the birth rate. D.Inwage denotes the wage growth rate. Table 7: OLS Regression Analysis (segmented dataset positive and negative economic growth countries)

	(1)	(2)
VARIABLES	womanrate	womanrate
lnx	-0.330***	-0.064
	(0.01)	(0.04)
lngdp	0.190***	0.449***
	(0.03)	(0.09)
rgdpg	0.142***	0.348
	(0.05)	(0.48)
birth	-0.410	-0.901***
	(0.39)	(0.08)
D.lnwage	0.063**	-0.859**
	(0.03)	(0.40)
Constant	1.364***	-1.118**
	(0.13)	(0.44)
Observations	215	37
R-squared	0.993	0.836
CountryFE	YES	YES
Year FE	YES	YES
Standard errors in parentheses		
*** p<0.01, ** p<0.05, * p<0.1		

## 6 Conclusion

### 6.1 Introduction

This chapter recapitulates the study, summarizes the main finding, discusses the contribution of the study and possible implications.

### 6.2 Recapitulation of the study

This research attempted to discuss the impacts of maternal leave policies on women's employment rate in 32 European countries. All data were collected from the Eurostat database, an official statistics agency of the European Union. The range of data spanned from 2009 to 2022. We used the OLS regression model to investigate the associations between the independent variable duration of maternal leave, dependent variable, women's employment rate, and other control variables, including GDP, economic growth rate, wage growth rate, and birth rate.

Maternal leave can benefit women as it affords them the necessary time to recuperate postchildbirth, with job security and income. However, an extended duration of maternity leave potentially has detrimental effects on women's employment, as employers may be less inclined to hire female employees. Moreover, lengthy maternal leave duration further causes career stagnation, skills loss, and other negative consequences on women's career trajectories. Thus, the first hypothesis (H1) is that maternity leave policies have a negative impact on the employment rate of unmarried women. In addition, given the close relationship between macroeconomic growth and job markets, we were also interested in examining how economic growth rates might interact with the duration of maternity leave and the rate of women's employment. Since we discussed maternal leave policies and women's employment rates in 32 different countries, their economic performances should be a crucial factor to consider. Therefore, our second hypothesis is that (H2): the impact of maternal leave policies on women's employment rates in countries with positive economic growth is negative. Our third hypothesis is that the effects of maternal leave policies on women's employment rates in countries with negative economic growth are negative.

This research is worthwhile to conduct as existing studies on maternity leave policies in Europe

focus on married women with children, leaving a gap in our understanding of how these maternal welfare policies affect unmarried women or those without children. This oversight is significant as maternity leave policies influence different demographic groups differently. Specifically, the anticipation of future maternity leaves may affect hiring and promotion decisions for all women, regardless of their familial or marital status.

Most current studies primarily employ surveys to understand individual experiences of maternity leave and its impact on employment. However, these methods may only partially capture the broader systematic effects of such policies. Using macroeconomic data, like GDP, national employment rate, and wage levels, could illuminate more general societal trends and economic implications brought by maternity leave policies. As such, there is a need for more macro-level research on the relationship between women's employment rates and maternity leave duration.

#### 6.3 Summary of Main Finding

The Ordinary Least Squares (OLS) regression analysis suggests that the influence of the length of maternity leave on the employment rate of women is significant and negative. A 1 unit extension in maternity leave corresponds to a decrease of 0.316 units in the employment rate for women (p<0.01). This demonstrates that rather than fostering higher employment rates for women, maternity leave policies reduce women's employment and job opportunities.

In terms of the control variables, the regression analysis reveals significant relationships. Specifically, for each unit increase in GDP, the rate of women's employment rises by 0.133 units (p<0.01). On the other hand, each unit increase in economic growth is associated with a decrease of 0.043 units in the rate of women's employment, but this association is not significant. Furthermore, for each unit increase in birth rate, the rate of women's employment rate declines by 0.632 units (p<0.1). Finally, for every unit increase in wage growth, the employment rate of women increases by 0.087 units (p<0.01).

To ensure the validity and precision of the research, we conducted several robustness checks. These included eliminating extreme values of women's employment rates and maternity leave duration exceeding 300 days. We also partitioned the dataset into even and odd years, allowing us to investigate if observed relationships and patterns remained consistent across different periods. All these tests yielded results similar to those from the original OLS regression model, with maternity leave duration negatively correlated with women's employment rate significantly; GDP and wage growth rate positively and significantly linked to women's employment in countries with various maternity leave policies; birth rate negatively associated with women's employment rate; and the influence of economic growth on employment rate being positive but insignificant.

In addition, we carried out a heterogeneity test to examine the effects of maternity leave duration on women's employment rate in countries with positive and negative economic growth. After dividing the dataset based on countries' economic growth, we found that both positive and negative economic growth countries showed a negative impact of maternity leave duration on women's employment rate. However, the effect of maternity leave policies on women's employment rates was not significant in countries experiencing negative economic growth. The association between control variables, GDP, economic growth, wage growth, and birth rate all indicated similar patterns with the OLS regression model. Specifically, an increase in GDP leads to a rise in women's employment rate, particularly in countries experiencing negative economic growth. Economic growth is positively associated with women's employment rate in countries with positive economic growth. However, this relationship is not notable in countries undergoing economic contraction. In both types of countries, birth rates negatively influence women's employment rate, with the effect being more significant in countries with a declining economy. Wage growth significantly correlates with women's employment rates across all countries. In countries with positive economic growth, wage growth positively associates with women's employment rates. In contrast, in countries with negative economic growth, wage growth negatively associates with women's employment rates.

To summarize, the regression model, robustness tests, and heterogeneity tests all show a negative relationship between the length of maternity leave and women's employment rate. This relationship is more pronounced in countries experiencing positive economic growth. Regarding the control variables, GDP, economic growth, and wage growth are positively associated with the rate of women's employment, while the birth rate negatively correlates with women's employment rates.

### 6.4 Contribution of the study

Finally, as a large amount of previous research utilizes questionnaires and surveys as data sources, macroeconomic data in this research offers a more holistic view of the issue, bridging individual experiences and broader economic and social trends. This approach can be important for policymakers in formulating maternity leave policies that can balance women's needs and the economy's demands. Furthermore, the findings from this research could lead to policy implications that promote more equitable employment opportunities for women. Understanding the potential drawbacks of extended maternity leaves on women's employment rates may help policymakers to mitigate these effects, ultimately contributing to gender equality in the workforce.

### 6.5 Implication

This research augments the current body of literature on the relationship between maternity leave policies and employment rates. In addition, it introduces new insights into how extended maternity leave durations may negatively impact women's employment rates, especially in countries with positive economic growth.

Secondly, this study's comprehensive analysis and robustness checks offer a detailed examination of the research outcomes. It extends the understanding of the dynamics between maternity leave policies and women's employment. Specifically, the robustness checks and heterogeneity tests conducted in the study not only ensure the reliability of the findings but also shed light on the nuanced interactions between maternity leave duration and women's employment rates under various economic conditions.

Based on the above analyses and findings, we have the following suggestions for maternal leave policies.

#### 6.5.1

#### Shared Child-rearing Responsibilities

Policymakers should promote a more balanced division of child-rearing responsibilities, making maternity and parental leave policies more flexible and inclusive. A well-structured parental leave policy should allow fathers to partake in leave benefits, which could help mitigate the negative impact that extended maternity leave may have on women's employment rates. Considering that fathers typically only utilize non-transferable, well-compensated leave, introducing mandatory paternal leave could be beneficial (Casey & Corday, 2008; Castro-García & Pazos, 2016). Governments could consider offering financial support or tax incentives to encourage shared childrearing responsibilities, and flexibility should be given to parents to work when required during their parental leave.

#### 6.5.2 Flexible Working Conditions

Considering the breastfeeding and childcare need, providing flexible working conditions, including flexible work hours and the ability to work remotely, is necessary for new mothers. It may assist women in smoothly transitioning back to work post-maternity leave and maintaining a healthier work-life balance. Governmental measures could incentivize employers to establish these flexible working arrangements for their workforce, potentially through tax relief or other advantageous measures. This could create a supportive environment for women to manage their professional roles and parental responsibilities more effe

#### 6.5.3 Better Vocational Training and Educational Support

Provide better vocational training and educational support to help women enhance their professional skills and knowledge level. This can assist women in better adapting to changes in the workplace and improve their competitiveness in employment. The government can offer more training and educational opportunities for women through measures like educational subsidies and vocational training programs.

#### 6.6 Limitations of the study

#### 1. Data Limitations:

Despite the extensive amount of data utilized in this research, the quantity of available observational data at the macro level still needs to be increased. The complexity of macroeconomic and societal factors influencing women's employment rate and maternity leave policies requires a larger, more diverse, and temporally extensive dataset to fully understand and interpret the dynamics. This limitation potentially impacts the generalizability and accuracy of our findings and their implications. Future research could benefit from using a more expansive dataset, spanning a more extended time period and including a more comprehensive array of demographic and economic variables.

#### 2. Theoretical and Methodological Limitations:

The researcher's understanding and application of existing variables and theories may need to be more accurate due to limited foundational knowledge in the field. Moreover, the methodologies applied in this research, while rigorous, have their own inherent limitations. The research design might not fully account for the interplay of all the nuanced factors influencing women's employment rate and maternity leave policies. Future work could benefit from more diverse methodological approaches and a deeper theoretical understanding.

#### 6.6.1 Suggestions for Future Research

Like this study, most of the existing research on welfare policies focused on developed countries. This limits the diversity and generalizability of the research findings, as socio-cultural and economic contexts vary greatly worldwide. The scope of the research should be expanded, for example, to some developing countries, where maternity leave policies and women's employment scenarios may differ substantially. By including developing countries, the research will provide more comprehensive insights and reveal unique dynamics that are not present or not as pronounced in developed nations.

In addition, we focus solely on maternal leave in this research. Future studies could broaden this scope to consider the influence of paternity leave, facilitating a comprehensive examination of parental leave's effects on employment. For example, future research may collect data on men's employment rate to understand the differential impacts of paternity leave on men's employment, as compared to maternity leave on women's employment.

Future research can further subdivide our dependent variable, women's employment rate. Instead of only looking at women's employment rates in general, researchers can investigate the employment rates of various subgroups: for example, employment rates of women who have taken maternity leave and those of married men with children. Subdividing employment rate may potentially highlight different trends and implications of parental leave policies for different demographic groups. These insights can lead to a more precise understanding of the impacts of maternity leave policies and can guide more targeted and effective policy-making.

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