THE POTENTIAL IMPACT OF PAID FAMILY LEAVE POLICY ON THE ECONOMIC AND HEALTH OUTCOMES OF LOUISIANA MOTHERS

AN HONORS THESIS

SUBMITTED ON THE THIRTIETH DAY OF APRIL, 2020

TO THE DEPARTMENTS OF ECONOMICS AND PUBLIC HEALTH

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

OF THE HONORS PROGRAM

OF NEWCOMB-TULANE COLLEGE

TULANE UNIVERSITY

FOR THE DEGREE OF

BACHELOR OF SCIENCES

WITH HONORS IN ECONOMICS AND PUBLIC HEALTH

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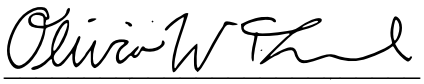

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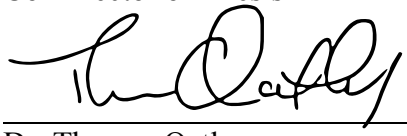

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Olivia Thurmond The Potential Impact of Paid Family Leave Policy on the Economic and Health Outcomes of Louisiana Mothers. (Dr. Mary Olson, Economics; Professor Mollye Demosthenidy, Public Health)

This thesis investigates the potential impact of paid family leave policy on mothers' economic and health outcomes in Louisiana. While existing research offers evidence of paid family leave policies' impact on labor market and health outcomes in states with existing paid leave policies, this work seeks to offer predictions of how a paid family leave policy could impact women in Louisiana. Chapter One outlines the current paid family leave policy landscape in Louisiana and the nation as a whole, highlighting bipartisan support for paid family leave policies, inadequacies in current parental leave offerings, and current health and economic inequities faced by mothers in Louisiana, providing a rationale for the thesis. Chapter Two presents the reader with a review of the existing literature on the promising effects of parental leave policies on three different outcomes: leave-taking patterns, maternal economic outcomes, and maternal health outcomes. Chapter Three offers predictions of how a state-level paid family leave policy will impact leave-taking patterns, employment, wages, and physical and mental health outcomes for mothers in Louisiana. The thesis concludes by asserting the potential for a paid family leave policy to improve both economic and health outcomes for mothers in Louisiana, and offering suggestions for how such a policy can best be shaped to maximize its positive impact on women in Louisiana.

ACKNOWLEDGEMENTS

I would like to gratefully acknowledge Dr. Mary Olson and Professor Mollye Demosthenidy for offering their time and support to me as Co-Directors for this thesis. I would also like to sincerely thank Dr. Thomas Oatley for serving as my Third Reader. Thank you also to the Tulane Honors Program and departments of Economics and Public Health for their support and guidance in writing this thesis.

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Parents of infants in Louisiana currently have no state-supported access to paid leave. After giving birth, many mothers are granted access to some unpaid, job-protected leave, to be referred to as "family leave", to care for a family member, including a new child. This access is protected at a federal level by the Family and Medical Leave Act (FMLA), passed in 1993 (Government Publishing Office, 2019). However, despite this policy, there exist significant disparities in access to paid leave for mothers in Louisiana.

If a woman only has access to unpaid leave and she takes any leave after childbirth, giving birth is directly associated with an immediate drop in her income. Empirical evidence shows that long-term drops in income have negative impacts on health outcomes and well-being. However, there has not been much research on the impact of short term drops in income, specifically, as the result of unpaid leave taking. If a woman returns to work after unpaid leave and she is an eligible employee, then her pre-leave income is legally protected under the FMLA, and her income will rise to its previous level. This drop in income also occurs for men who take unpaid leave after the birth or adoption of a child. However, data shows that leave take-up is much higher for women than men (Institute for Women's Policy Research, 2017). Thus, mothers may be experiencing this temporary drop in income more often than fathers. Furthermore, this temporary drop is occurring at a critical time for recent parents when they are experiencing new life pressures, both financial and on their mental and physical health.

This disparity in leave-taking may be contributing to the current disparities in economic outcomes for women, from earnings to labor force participation rates. Louisiana women currently face severe inequities in both their health outcomes and economic outcomes. State-level data shows that Louisiana has the second highest percentage of women in poverty in the nation with 21.8% of women falling below the poverty level in 2016 (Institute for Women's Policy Research, 2018). Louisiana also has the highest maternal mortality rate in the United States (America's Health Rankings, 2019b). These disparities in access to leave, economic outcomes, and health outcomes, lead me to my research question: **how would a statewide paid family leave policy (PFL) impact women's economic and health outcomes in Louisiana?**

To answer this question I also seek to answer several sub-questions: first, **what is the current debate surrounding PFL policy?** To answer this, I will introduce the main economic issues and questions surrounding paid leave policy. Second, **what are the current outcomes of that debate in Louisiana?** To answer this, I will outline the current policy provisions in Louisiana for parents of infants and evaluate the current inequities in health and economic outcomes for mothers in Louisiana. Third, **what could a paid leave policy look like in Louisiana?** To answer this, I will offer examples of more generous paid leave policies for parents in the U.S., offering one potential PFL structure that could exist in Louisiana: an employee-employer funded "insurance system" covering family leave, using the proposed SB 186, "The Louisiana Family and Medical Leave Benefits Act" (LA FMLBA) as the basis for my analysis. Fourth, **what is the demonstrated impact of existing PFL policies**; do mothers and fathers take leave if

offered it; how do changes in leave-taking affect firms, and economic and health outcomes for mothers? To answer this, I will provide a review of existing literature on the impact of paid family leave policies.

Chapter Three will serve as my unique contribution to the literature, offering predictions of how a paid family leave policy would impact mothers specifically in Louisiana, and answering the question: **how will a PFL policy in Louisiana impact the leave-taking rates, employment rates, earnings, and health outcomes of mothers?** To answer this question, I analyze three models to predict the impact of PFL on leave-taking, economic outcomes, and health outcomes. I will address the following sub-questions in my analysis: will the program increase leave-taking; how will PFL impact the labor market; and how will the impact of PFL in Louisiana differ from the impact observed in California? Unlike existing literature, my analysis will focus primarily on the impact of such a policy on *women's* quality of life. The main variables I will use to evaluate this potential impact on quality of life are the direction of the policy's impact on employment rates, earnings, rates of exposure to risk factors for maternal morbidity, and rates of maternal mental health issues. I will conclude a note on the limitations of my analysis and a recommendation for a paid family leave provision in Louisiana.

My primary findings are that PFL has a strong potential to positively impact the health and economic well-being of Louisiana mothers. I project that PFL will likely improve rates of maternal morbidity by increasing resources available to mothers, decreasing their exposure to stress, and decreasing their rates of postpartum depression. I find no evidence that a PFL policy structured as the proposed LA FMLBA will impact

maternal mortality rates. These findings suggest that a PFL policy should be implemented as soon as possible in Louisiana and legislators should consider adding a prenatal care leave provision and expanded eligibility requirements to the proposed legislation.

CHAPTER ONE: THE CURRENT PAID FAMILY LEAVE POLICY LANDSCAPE

Paid family leave is a topic of interest gaining both bipartisan attention in Congress and widespread public support. Proponents of paid family leave argue that it helps women economically and supports the health and well-being of women and their children. Opponents suggest that paid leave may hurt employers' bottom line and could lead to hiring discrimination against women, as data shows women are more likely to use a paid leave benefit for their children than men are (Institute for Women's Policy Research, 2017). Past research has also examined whether women and men would even take paid leave if offered it.

Research indicates general support for paid family leave (PFL) policies. A survey conducted by the Pew Research Center in 2017 found that "most Americans say workers should receive paid family and medical leave" (Pew Research Center, 2017). The survey found that support for leave varied slightly depending on whether that leave was for mothers or fathers with 82% saying mothers should have paid leave after birth or adoption and 69% saying fathers should have paid leave after birth or adoption of a child. Further, of those surveyed who supported paid leave for both mothers and fathers, results pointed to support for more time off for mothers than for fathers. In Louisiana specifically, 82% of voters surveyed in 2018 indicated support for a national PFL policy (GBA Strategies, 2018). Despite apparent support for paid parental leave offerings, the national survey shows that Americans think employers rather than the government should cover the cost of paid leave (Pew Research Center, 2017). In Louisiana, 34% of voters

surveyed indicated that they think a national PFL policy should be funded by both employers and employees (GBA Strategies, 2018). The partisan discussion gains real steam when considering whether employers should be mandated to provide paid leave (Horowitz et al., 2019). The debate over parental leave policies have not yet produced any significant national paid leave policy changes.

Federal Policies Addressing Family Leave in the U.S.

The Family and Medical Leave Act of 1993 (FMLA) is the main federal policy addressing family leave in the United States. The FMLA offers many employees unpaid, job-protected family leave, but the range of beneficiaries under the law is limited. Nationally, the FMLA only requires job-protected family and medical leave for "eligible employees of a covered employer" (Government Publishing Office, 2019). Specifically, the FMLA only mandates access to leave for employees who have been working at the same employer for 12 months before their leave begins and whose employer is large enough to have at least 50 employees (Government Publishing Office, 2019). Thus, employees of smaller businesses, or who have not been employed at the same place for at least a year, are not covered by the FMLA. Additionally, unpaid, job-protected leave is only guaranteed for 12 weeks. Perhaps an even more significant gap in the FMLA is the lack of a provision for paid leave. While the act grants leave for certain eligible employees, the federal law has no requirement that those employees are paid during their leave (Government Publishing Office, 2019). Hence, taking unpaid leave for the birth of a child is likely to correlate with a decline in both individual and household incomes.

The Pregnancy Discrimination Act of 1978 is another federal act targetting workforce discrimination against mothers. The Act prohibits discrimination in the workforce based on pregnancy, legally protecting women from unfavorable treatment from employers due to pregnancy, childbirth, or related medical conditions (Institute for Women's Policy Research, 2014). Specifically relating to maternity leave, it requires that employers provide the same leave to women related to pregnancy/childbirth conditions as other workers receive for a temporary disability or medical condition. However, it does not require paid leave unless the employer provides paid leave for other "temporary disabilities" (Institute for Women's Policy Research, 2014). Despite this policy, nationally, only roughly one-sixth of private industry workers had access to paid family leave in 2018 (Bureau of Labor Statistics, 2019)

Family Leave in Louisiana

Although national policy has been largely unchanged beyond the FMLA, the Act does allow states to set more expansive standards for leave. These expanded standards vary widely from state to state; some states have no legislation addressing family leave beyond the FMLA, while others such as California, New Jersey, Rhode Island, New York, Washington State, and the District of Columbia offer paid leave (Keshner, 2019). Louisiana falls between those two extremes. On a state level, there are two specific "extra" provisions for family leave that Louisiana has set: one is the provision of hours for parents to take leave for their child's school-related event; the other is the expanded standards for maternity leave (National Conference of State Legislatures, 2016; Institute for Women's Policy Research, 2014). Of perhaps more significance is the latter, enacted

by Louisiana's Pregnancy Disability Leave Law. The Pregnancy Disability Leave Law has one main contribution to family leave policy in the state; essentially, the law expands FMLA coverage to employers of 25 or more and removes the "hours worked" requirement of the FMLA. While the requirement that an employee must have worked at the company for at least 12 months prior to leave stands, the requirement that the employee must have worked 1,250 hours in that year is removed by the Louisiana Pregnancy Disability Leave Law. This expands the number of FMLA-covered employees in Louisiana slightly. However, that expansion only applies to coverage of pregnancy, childbirth, or related medical conditions. There are no guaranteed paid benefits, no funding provided, and no additional coverage of parents who did not give birth to the child (Institute for Women's Policy Research, 2014).

In states that have short-term disability programs, the Pregnancy Discrimination Act of 1978 helps some women access some form of paid leave related to their pregnancy. However, Louisiana has no such short-term disability program. In Louisiana, short-term disability insurance (TDI) exists in the private market. This private market does not currently provide sufficient access to paid family leave due to the current unconsolidated state of the private TDI insurance market for parental leave coverage in Louisiana and likely existences of factors leading to high premium costs, and thus, market failure. TDI, while not very common in Louisiana, is a type of insurance with similar goals to paid family and medical leave insurance, intending to relieve some of the financial hardship associated with short-term absences from work. Family and medical leave, essentially a type of temporary disability insurance, covers those such relatively

short-term absences (under 12 weeks), needed by caregivers to care for themselves or others, post-birth, adoption, or other qualifying family or medical related event. If a Louisiana employee without a paid family leave offering through their employer wishes to access paid leave during or after a pregnancy, they must have purchased a private short-term disability policy prior to their pregnancy, as even "benefits for pregnancy bed rest are payable only when coverage begins prior to conception" (Haney, 2015). Thus, relatively few employees in Louisiana have access to short-term disability insurance whether it be for an illness or pregnancy-related condition.

Existing analyses and empirical data on mandated benefits and wage premiums in other insurance markets show that insurance markets such as the one existing for PFL coverage in Louisiana are prone to market failures including moral hazard and adverse selection. Moral hazard refers to the phenomenon that having insurance changes an individual's behavior in the applicable market. Adverse selection refers to the tendency of people most likely to use the insurance benefit to obtain coverage to a greater extent than those less likely to use the benefit.

Moral hazard is likely leading to insufficient parental leave insurance coverage in Louisiana by causing high premiums. In the market for family leave, moral hazard refers to increases in leave-taking as a result of increased leave insurance coverage, and thus an apparent decrease in price of taking leave for the worker. Moral hazard provides that as insurance increases, the expected loss to the insurance fund from a pregnancy also increases. In Louisiana, wage replacements offered by existing TDI policies for pregnancy create a smaller financial incentive for covered employees to refrain from

leave-taking. Thus, leave-taking becomes relatively less expensive to the covered employee, and they likely increase the amount of leave taken. This phenomenon appears to have occurred with existing PFL implementation (Bartel et al., 2015; Baum & Ruhm, 2016). In the private market, this leads TDI insurance providers to increase premiums. Assuming parental leave insurance is a normal good, as premiums rise, the number of workers willing and able to pay the premium decreases, leaving a majority of workers without coverage.

Adverse selection has also led to high premiums, and unmet demand for paid family leave coverage, and occurs concurrently with moral hazard. It manifests as the most unhealthy people purchasing insurance coverage to a greater extent than than the most healthy people in a society. In the market for TDI for pregnancy, this manifests as the most likely people to become pregnant purchasing TDI coverage to a greater extent than the least likely people to become pregnant. In other words, adverse selection likely manifests in the market for TDI as more young women purchasing TDI for pregnancy than men or older women, because they are more likely to become pregnant. This leads to a skewed risk pool, unrepresentative of the population and full of the most "high-cost" beneficiaries. Overtime adverse selection has caused the private market for PFL in Louisiana to fail to offer affordable rates sufficiently. The increase in premiums as a result of adverse selection has decreased family leave coverage as workers who value the benefit less than the high premiums have likely neglected to purchase private pregnancy leave insurance plans.

Market failures in the private TDI market and a lack of state-level PFL have left many workers without paid family leave coverage. One study found that only 35% of new mothers in Louisiana had access to paid leave following the birth of their child; the average access for new mothers in the United States is 55% (Raabe & Theall, 2016). Current data on access to paid family leave for parents who were not pregnant, including biological fathers, adoptive parents, and others, in Louisiana is not presently available. However, there are state-level assessments of access to paid sick leave; in many cases paid sick leave may be used to care for a sick child or spouse. An assessment of Louisiana showed that 45% of private sector employees do not have access to paid sick leave; the average access in the US is 61% (Raabe & Theall, 2016). In the public sector, Louisiana does offer some access to paid leave. For example, public school teachers in Louisiana are allowed 30 days of paid leave, of their 6 weeks of FMLA unpaid leave, for the birth or adoption of a child (The Associated Press, 2018).

Despite some access to paid leave by Louisiana parents, data show that around 60% of mothers take either no leave or only unpaid leave after their pregnancy (Louisiana Department of Health, 2019). The relatively low access to paid sick days and the high rates of women who report only taking unpaid leave suggest that any private paid family leave offerings either by employers or private TDI plans are not covering many women in Louisiana currently. The relatively low access of PFL without a state-level policy in Louisiana is a value proposition for a PFL policy, as such a policy in Louisiana would disrupt the relatively inactive private PFL market, essentially creating a public short-term disability insurance system with lower premium costs due to greater risk pooling. An

effective PFL policy can lead to an increase in the number of workers with a family and medical related short-term disability insurance policy.

Leave-Taking Patterns in Louisiana

The current lack of paid leave provisions in Louisiana may be contributing to mothers' leave-taking post-birth or adoption. Data on Louisiana shows that women tend to work during their pregnancy, and many women do not take family leave after giving birth. The Louisiana PRAMS Data Report from 2017 shows that 63.5% of recently pregnant women surveyed in 2017 worked during their pregnancy (Louisiana Department of Health, 2019). Of those women, 53.3% took only unpaid leave after giving birth and 6.5% did not take any leave (Louisiana Department of Health, 2019). When asked about the factors that impacted their decision to take maternity leave, 37.7% cited financial affordability as a deterrent, 16.2% said they were afraid of losing their job if they took leave, and 34.8% said that they did not have access to paid leave (Louisiana Department of Health, 2019). These data show that most mothers (63.5%), at least of those surveyed, remained in the labor force during their pregnancy. Additionally, many considered the impact that taking leave would have on their job and financial status. Thus, these data suggest that a state-level policy expanding access to paid leave for Louisiana mothers could increase their leave-taking post-birth or adoption of a child.

Current Economic Outcomes for Louisiana Mothers

Inadequate state policies and systems in Louisiana have supported significant economic disparities for women, especially mothers, in Louisiana. State-level data on Louisiana women give insight into earnings and employment metrics for women, both

mothers and non-mothers, that shed light on labor market opportunities available to women. A greater percentage of women live in poverty in Louisiana than in all but one other U.S. state (Institute for Women's Policy Research, 2018). Unlike in other states, the percentage of women above poverty has gone down from 2004 to 2016 in Louisiana (Institute for Women's Policy Research, 2018). In the Institute for Women's Policy Research's "Poverty & Opportunity" rankings, Louisiana comes in last (Status of Women in the States, 2019). For "Employment & Earnings", Louisiana ranks 48th (Status of Women in the States, 2019). These trends may support an argument for government intervention in improving women's economic outcomes in the state.

To begin to understand the inequities mothers in Louisiana face, an evaluation of their participation in the labor market is essential. In Louisiana, there is an 11% gap between women and men's labor force participation rates (National Partnership for Women and Families, 2020). The national labor force participation rate for women age 20 and older in 2017 averaged at 58.5% (Bureau of Labor Statistics, n.d.). In Louisiana in 2016, the labor force participation rate for women was a lower 56.1%, suggesting that factors in Louisiana may be contributing to less women participating in the labor force (Institute for Women's Policy Research, 2018). While state-level data on the labor force participation rate for mothers in Louisiana are limited, national data shed light onto general trends in labor force participation rates for mothers with children who were recently born and mothers of older children. Nationally, 2017 trends show that mothers with older children have a higher labor force participation rate than mothers with young children (Bureau of Labor Statistics, 2018c). In 2018, women with young children in

Louisiana reported higher rates of switching from full-time to part-time work (16%), and having to quit a job (15%) or turn down a promotion (12%) due to insufficient child care, compared to men with young children (2%, 3% and 2%, respectively) (Louisiana Women's Policy and Research Commision, 2019). Thus, data suggest that being a mother, specifically to a young child, may be a factor in determining a woman's participation in the labor force and career development. One report suggests that lack of paid leave is a key factor contributing to the gap between Louisiana women and men's participation in the labor force. If the goal is to remove motherhood from being a factor determining women's labor force participation, a paid leave policy that increases women's attachment to the labor force by giving them increased work-family flexibility and a financial incentive to stay employed, may be an effective provision.

National data show that married mothers are less likely to participate in the labor force than mothers with other marital statuses, including mothers in same-sex marriages (Bureau of Labor Statistics, 2018a). Data from the CDC show that Louisiana has consistently had structurally elevated rates of births to unmarried mothers compared to the national average (National Center for Health Statistics, 2019). In 2018, 39.6% of births were to unmarried mothers in the United States. In Louisiana, the percentage of births to unmarried mothers was much higher at 53.3% in 2018, the second highest rate in the U.S. (National Center for Health Statistics, 2019). Thus, the labor force participation rate for mothers with young children in certain areas, like Louisiana may be biased upward if there are a disproportionate number of unmarried mothers compared to numbers in the U.S. as a whole. If the already lower labor force participation rate for

women in Louisiana is truly biased upward, there may be an even stronger call for policy intervention to improve women's labor force participation. As a valued employment benefit, a paid leave policy for parents, specifically mothers, could improve their labor force participation rate.

While disparities in economic status indicators exist for all women in Louisiana, these inequities are exacerbated when the data is broken down by race. While the total labor force participation rate for women in Louisiana was 56.1%, the rates for different races range from 59.7% for Black women to 45.4% for Asian women (Institute for Women's Policy Research, 2018). White women had a labor force participation rate of 53.8%, black women, 59.7%, Hispanic women, 57.4%, Asian women, 45.4%, and Native American women, 45.4% (Institute for Women's Policy Research, 2018). While differences in distributions of marital statuses among different races could play a role in these differences in labor force participation rates between white women and women of other races, a policy intervention aimed at equity among races in women's labor force attachment, such as a PFL policy, should consider the existing disparities. Although data on women's earnings by race is not available for Louisiana, disparities in earnings between all black and white workers in the state suggest that similar earnings disparities exist between black and white women in Louisiana; black workers earn $0.63 for every dollar earned by white workers (U.S. Department of Labor, 2013).

Current Health Outcomes for Louisiana Mothers

Combined with inadequate state policies and systems in Louisiana, existing economic disparities have supported significant health disparities for women, especially

mothers, in Louisiana. Louisiana women experience high rates of preterm births and mortality surrounding childbirth. Further, there exist significant disparities in preterm birth rates and maternal mortality between women of different backgrounds in Louisiana.

At nearly three percentage points higher than the national average, Louisiana has the second worst preterm birth rate in the U.S. (America's Health Rankings, 2019b). Since 2014, preterm birth rates have been rising in both Louisiana and the U.S. overall (America's Health Rankings, 2019b). The NIH highlights several groups considered at-risk for preterm birth including: women with diabetes, obese women, African American women, women with no healthcare during pregnancy, and women younger than 18 years old (NIH, 2017). Louisiana has the fourth highest rate of diabetes (America's Health Rankings, 2019c) and the fourth highest rate of obesity in the nation (CDC, 2019). Louisiana also has the third highest teen birth rate (CDC, 2020) and the sixth highest rate of mothers reporting no prenatal care (Osterman & Martin, 2018). While ethnicity is not a factor that causes preterm births, African American women are considered an at-risk group. African Americans make up a higher percentage of the Louisiana population than most other states; Louisiana had the second highest percentage of black residents, according to the 2000 U.S. Census with 32.5% of Louisianans identifying as "black/African American alone" (McKinnon, 2001). The high prevalence of these risk factors and the intersectionality between at-risk groups may be contributing to Louisiana's high preterm birth rate. Additionally, preterm birth is the second leading cause of infant mortality in the United States (Ely & Driscoll, 2019) and

as a risk factor for maternal depression and PTSD, may be contributing to maternal depression rates in Louisiana (Anderson & Cacola, 2017).

Louisiana has the highest maternal mortality rate (MMR) in the country (America's Health Rankings, 2019b). Measures of MMR are created by observing the "Number of deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 births" (America's Health Rankings, 2019b). Estimated at 72.0 per 100,000 live births, Louisiana's 2019 MMR is over twice the national rate of 29.6 per 100,000 live births (America's Health Rankings, 2019b). Further, this rate is increasing at a higher rate than that of the nation.

These disparities in maternal mortality rates between Louisiana and other states illustrate a significant inequity in health outcomes for mothers. However, the disparities between mothers of different races/ethnicities within Louisiana are perhaps a more significant indicator of the inequity resulting from state-level conditions and policies. In Louisiana, the MMR for black women is over twice as high as that for White women (America's Health Rankings, 2019b). At 112.2 per 100,000 live births, the MMR for black women in Louisiana is nearly four times the national average for all women. While the racial disparity in MMRs persists at a national level, rates for both black and White women in Louisiana are structurally elevated to those of the nation (America's Health Rankings, 2019b). Thus, addressing the elevated rates among black mothers in Louisiana may require a policy specifically aiming for equity in MMRs across races and ethnicities.

As family leave provisions have been associated with significant health benefits for mothers including birth outcomes and mental and physical postpartum health outcomes (Institute for Women's Policy Research, 2014; Stearns, 2015; Butikofer et al., 2018; Chatterji et al., 2012; Chatterji & Markowitz, 2012; Staehelin et al., 2007; Dagher et al., 2013; Avendano et al., 2015), these existing poor health outcomes for mothers may call for a more extensive family leave policy in Louisiana.

An evaluation of health outcomes for mothers in Louisiana is incomplete without also considering mental health outcomes specifically. Postpartum depression is a significant, postpartum mental health outcome, characterized by depressive symptoms after giving birth. The 2017 Pregnancy Risk Assessment Monitoring System (PRAMS) shows that in 2017 15.1% of women that delivered a live birth in the past 3 to 6 months in Louisiana reported postpartum depressive symptoms (Louisiana Department of Health, 2019). The PRAMS defines postpartum depressive symptoms as "'always' or 'often' feeling down, depressed, or hopeless or having little interest or little pleasure in doing things she usually enjoyed since delivery (Louisiana Department of Health, 2019). The rate of reporting postpartum depressive symptoms increased by 3.8 percentage points from 2016 to 2017 (Louisiana Department of Health, 2019).

While the 2017 report does not outline disparities between mothers of different races and education attainment levels, the 2016 report sheds light on trends that likely existed similarly in 2017. In 2016, the rate of reporting postpartum depressive symptoms was highest at 14.7% in Non-Hispanic black women, followed by 10.6% in Hispanic women and 8.5% in Non-Hispanic White women in Louisiana (Partners for Family

Health, n.d.). Non-Hispanic black women also have the highest rate of preterm births in Louisiana (16.2% of live births), a risk factor for maternal mental health issues (Anderson & Cacola, 2017). White women have the lowest rate of both preterm births in Louisiana (10.7%) and reporting of postpartum depressive symptoms in Louisiana (8.5%) (America's Health Rankings, 2019c; Partners for Family Health, n.d.). In 2016, Louisiana mothers with a high school education or less also reported postpartum depressive symptoms at a higher rate (14.5%) than mothers with higher levels of educational attainment (8.6%) (Partners for Family Health, 2019). The 2017 PRAMS report also identifies trends between exposure to certain stressors and rates of reporting postpartum depressive symptoms. In 2017, of the 59% of Louisiana mothers who reported experiencing financial stress before or during their pregnancy, 17% also reported postpartum depressive symptoms. Of the 33% of mothers who reported emotional stress, 18% of mothers reported postpartum depressive symptoms (Louisiana Department of Health, 2019). If PFL can address these financial and emotional stressors or the factors leading to vulnerable mothers' high rates of postpartum depression, then a PFL policy may be able to improve Louisiana mothers' mental health outcomes surrounding pregnancy.

To be elaborated on in Chapter Two, studies examining the impact of maternity leave policies on mental health have found that generous parental leave policies may benefit both the long-term and short-term mental health of mothers (Avendano et al., 2015; Chatterji & Markowitz, 2012). Thus, improved mental health outcomes for mothers may be a value-proposition for enacting a more generous leave policy in Louisiana.

CHAPTER TWO: LITERATURE REVIEW ON THE EFFECTS OF PFL

While PFL laws are by no means widespread in the United States, there are 8 states and D.C. that have passed PFL: Rhode Island, California, New Jersey, New York, D.C., Washington, Massachusetts, Conneticutt, and Oregon. However, benefits in D.C, Massachusetts, Connecticut, and Oregon have not yet begun. To lay the foundation for my analysis, this chapter will review the existing empirical evidence about the effects of PFL policies on three different outcomes: leave-taking patterns, maternal economic outcomes, and maternal health outcomes. This chapter concludes with a review of existing PFL structures outside of Louisiana, focusing on California's CA-PFL and a proposed PFL policy structure for Louisiana which will be the policy structure of focus for my analysis.

Effects of Leave Laws on Leave-Taking Patterns

Evidence from states and countries with leave laws suggests that paid and unpaid leave laws impact leave-taking. Further, evidence suggests that the extent of a leave law's impact varies based on the wage replacement offered by the law, the national or state context, and the barriers to leave takeup, such as affordability, accessibility, and job-protection that parents may face.

Unpaid Leave Policies

Research on the impact of unpaid family leave policies on leave taking has produced mixed results. Specifically considering the impact of the FMLA, four studies found evidence that post-FMLA women with young children took more leave (Klerman & Leibowitz, 2000; Waldfogel, 1999; Han et al., 2009). However, one study found the

impact of unpaid leave laws on maternal leave taking was only significant for married or college-educated mothers (Han et al., 2009). There is not much research on the impact of unpaid leave laws on fathers' leave taking, but Han et al. (2009), found that "fathers in states with leave laws increased leave taking by approximately two days relative to fathers in states without leave laws". While the aforementioned studies found significant evidence pointing to the positive relationship between the institution of unpaid leave laws and mothers leave-taking, there have also been studies that fail to find evidence supporting this relationship for any or all income or education levels of mothers (Baum, 2003; Han et al., 2009).

Paid Leave Policies

The existing literature suggests a state-level paid family leave provision increases leavetaking for both mothers and fathers. Two studies specifically analyzing California's PFL policy both found that mother's and fathers' leave taking increased as a result of the PFL policy (Bartel et al., 2015; Baum & Ruhm, 2016). However, there exists less of a consensus on the magnitude of that impact. A study by Rossin-Slater et al. (2013) points to differential effects of PFL laws on leave-taking in California for different groups. They find that black mothers, Hispanic mothers, mothers with a high school degree or less, and unmarried mothers had the greatest increase in maternity leave-taking after California's PFL law was enacted. While their results may be impacted by endogeneity, their conclusions suggest that the impact of PFL on leave-taking may vary based on mothers' race or educational attainment (Rossin-Slater et al., 2013).

In countries outside the U.S., studies have found evidence that implementing or increasing access to paid leave for parents increases leave taking for mothers, specifically. Two studies found that Norway's increase in PFL provisions increased leave-takeup by mothers (Carneiro et al., 2015; Dahl et al., 2013). A study on the impact of expansions of maternity leave coverage in Germany also found a positive relationship between expanded coverage and mother's leave taking (Schonberg & Ludsteck, 2014). A similar study of expanded PPL policy in Austria also found that increasing the amount of PPL accessible to eligible mothers increased their leave taking (Lalive & Zweimuller, 2009).

Factors Impacting Leave-Taking Rates

Existing studies investigating the attitudes and barriers surrounding PFL have identified two key barriers that have impacted leave-takeup rates post-PFL policy implementation: lack of awareness and lack of affordability (Tisinger et al., 2016; Silver et al., 2016; Appelbaum & Milkman, 2012; Milkman & Appelbaum, 2004; Houser & White, 2012; Sherriff, 2007). Lack of awareness and lack of affordability were identified as barriers across all PFL states (CA, NJ, RI) studied by Tisinger et al. (2016).

Lack of Awareness

Studies have identified lack of awareness as "the most fundamental barrier to use of paid family leave" (Tisinger et al., 2016). I will use Tisinger et al.'s definition for "lack of awareness", defining it as being unaware of the PFL benefit or not being aware enough of the benefit to take full advantage of it. Lack of awareness translates to poor accessibility of the program. While the Tisinger et al., study employed focus groups of

caregivers, rather than a more representative sample, several studies and reports offer more concrete data on lack of awareness of PFL (Silver et al., 2016; Appelbaum & Milkman, 2012; Milkman & Appelbaum, 2004; Houser & White, 2012; Sherriff, 2007). Of these studies, several outline inequalities in levels of awareness between different demographic groups.

Three studies in California, New Jersey, and Rhode Island identified awareness rates of around half, if not less, of their survey respondents (Silver et al., 2016; Appelbaum & Milkman, 2012; Houser & White, 2012). In Silver et al.'s study in Rhode Island, all of their respondents had access to the states TDI program, and thus the authors suspect that actual PFL awareness in RI may be below 50% for the general population (Silver et al., 2016). While these studies did not employ representative samples, surveys in California found that five years after PFL implementation only 28.1% of respondents in a representative survey were aware of PFL (Milkman & Appelbaum, 2004). Closer to implementation, even less respondents were aware of PFL (Milkman & Appelbaum, 2004). Houser & White's study in New Jersey found that around 60% of New Jersey residents said they had not "seen or heard anything about" NJ's PFL program.

When measuring full awareness, all three studies (Silver et al., 2016; Appelbaum & Milkman, 2012; Houser & White, 2012) found that even among the roughly half of respondents that were aware of the program, even less knew the actual benefits offered by the states' PFL programs. In Rhode Island, of those aware of the program's existence, fewer were aware of the details of the program including its funding structure (28%), level of wage replacement (43.5%), and job-protection provision (57%) (Silver et al.,

2016). In California, only 86.4% of those aware of CA-PFL were aware that PFL "can be used for bonding with a newborn" (Appelbaum & Milkman, 2012). In NJ, among those who were aware of the state's PFL program, 16.8% "did not know that it could be used to care for a seriously ill family member" (Houser & White, 2012).

The authors of these three studies all identified inequalities in levels of awareness based on various demographic characteristics, including income level, educational attainment, age, race, and employer size (Silver et al., 2016; Appelbaum & Milkman, 2012; Houser & White, 2012). All three studies identified low income individuals as a group with systematically lower awareness of PFL. The Rhode Island study found that non-white, lower income and less educated individuals had lower awareness of PFL (Silver et al., 2016). The New Jersey study found unmarried, black, and low income individuals had lower awareness (Houser & White, 2012). The California study found that less educated, low income, latino, and under-age 35 individuals had lower awareness (Appelbaum & Milkman, 2012). These studies highlight a pattern in PFL awareness inequalities in New Jersey, California, and Rhode Island that would likely manifest in Louisiana as well.

Lack of Affordability

Through surveys and interviews in PFL states, research has shown that lack of affordability is a potential barrier to access of PFL. Although PFL states offer some wage replacement during leave, many workers indicated that the wage replacement was not enough. Thus, the PFL affordability deterred them from accessing PFL (Andrew Chang & Co., 2015; Silver et al., 2016; Lerner & Appelbaum, 2014).

Effects of PFL Policies on Maternal Economic Outcomes

Existing studies of the impact of PFL on maternal economic outcomes have found generally positive impacts on employment and earnings, given a short leave-length. Theoretically, PFL policies can have ambiguous effects on the labor market. If PFL increases leave-taking, it is generally increasing time away from work. This could cause a decrease in workers' skills and lower future labor market attachment. However, in the opposite vein, if a worker would have quit their job without the PFL offering to take an extended, temporarily permanent leave, then PFL could positively impact job continuity, labor force attachment, and future labor market outcomes (Rossin-Slater, 2018). PFL policies also impact the labor market by impacting firms, who act as demanders in the labor market. Depending on the cost of PFL to firms, firms will shift their demand for labor.

Impact of PFL on Maternal Employment Rates

Studies in states and countries with PFL policies have generally found that leave laws are associated with greater job-continuity for women and higher employment rates post-childbirth in the short-run (Rossin-Slater et al., 2013; Baum and Ruhm, 2016). Rossin-Slater et al. (2013) found that in the 1 to 3 years after a birth, PFL is associated with higher work hours for women, conditional on their employment. However, they were not able to significantly test for differences in the effect of PFL on employment between subgroups (Rossin-Slater et al., 2013). Guendelman et al. (2006) found that women who take leave after their pregnancy work an average of one month more than women who quit due to lack of leave provisions beyond the FMLA. Houser & Vartanian

at the Center for Women and Work at Rutgers University (2012) found that women who took paid leave after the birth of a child experienced higher attachment to the labor force in the year after the child's birth. The authors found that paid leave-taking women were more likely to be employed 9 to 12 months after the birth of a child than non-leave-takers (Houser & Vartanian, 2012). A study of the impact of PFL policy in Rhode Island found that the policy was also associated with higher parental satisfaction around access to childcare, a documented factor contributing to Louisiana mothers of young children quitting their jobs and turning down promotions (Silver et al., 2015; Louisiana Women's Policy and Research Commision, 2019).

Impact of PFL on Mothers' Earnings

Along with an apparent association between leave benefits and job continuity, studies point to an association between leave-taking and earnings for women. In the short-term after giving birth, Houser & Vartanian (2012) found that women who took PFL of at least 30 days were "54% more likely to report wage increases in the year following the child's birth than are women who take no leave at all" (Houser & Vartanian, 2012). Waldfogel (1998) found that "maternity leave coverage, by raising women's retention over the period of childbirth, raises women's wages by increasing their levels of work experience and job tenure and allowing them to maintain good job matches". Boushey (2008) found that mothers who received pay during their leaves post-childbirth have present-day wages 9% higher than other mothers, after controlling for "other personal and job-related characteristics" (Boushey, 2008). More generally, studies have also found that women who maintain employment before and after birth,

rather than dropping out of the labor force, do not have the same decline in wages experienced by women who had a gap in employment surrounding the birth (Lundberg & Rose, 2000).

Impact of PFL on Demand for Labor

Existing studies investigating how PFL provisions have impacted firms have found that most employers report a positive or neutral effect of PFL on their productivity, profitability and performance, turnover, and morale (Appelbaum & Milkman, 2012). Of 253 California employers surveyed, 88.5% reported "no noticeable effect" or a "positive effect" on their productivity, 91.5%, on their profitability and performance, 92.8%, on their turnover, and 92.8%, on morale. Of particular note are the differential responses between firms of various sizes. In Appelbaum & Milkman's study, the smallest employers were more likely than the largest firms to report a positive effect or no noticeable effect from the PFL policy in California in all four metrics (Appelbaum & Milkman, 2012). Summarizing others' literature, a report by Tisinger et al. (2016) for the U.S. Department of Labor found that "once employers have experience with paid leave laws, they are generally supportive of paid leave and indicate that paid leave laws have had negligible to positive impacts on employer metrics" (Tisinger et al., 2016). As demanders in the labor market, firms' response to PFL can shift labor demand, potentially impacting equilibrium wages and employment rates.

Effects of PFL on Maternal Health Outcomes

Existing studies of the effects of PFL policies on mothers' health outcomes has found evidence that new PFL policies may have health benefits for mothers. A working paper suggests that these benefits may include improvements in mothers' physical health outcomes such as BMI, blood pressure, and pain levels (Butikofer et al., 2018). Additionally, existing studies have found that PFL can improve mental health outcomes, finding associations between leave-taking and mental health outcomes such as maternal depression and PTSD (Chatterji et al., 2012; Chatterji & Markowitz, 2012; Staehelin et al., 2007; Dagher et al., 2013; Avendano et al., 2015). Further, Avendano et al. (2015) suggests that PFL could have longer term effects on maternal health "by preventing or reducing the stress around childbirth". In Rhode Island, PFL was associated with better health and decreased levels of stress for parents who accessed the PFL benefit (Silver et al., 2015). Evidence also suggests that PFL can reduce preterm birth rates, a risk factor for negative maternal health outcomes including depression (Stearns, 2015; Anderson & Cacola, 2017).

Additionally, an existing study has found that PFL has an especially strong impact on maternal health for mothers from disadvantaged backgrounds, including black women, unmarried women, and lower-income women (Stearns, 2015).

Studies of the effects of PFL on maternal health outcomes have found that while the presence of leave entitlements may improve maternal health, policy changes extending existing leave entitlements do not extend the positive impact on maternal

health; rather, there may be diminishing returns to leave length at a certain point (Baker & Milligan, 2008).

Review of Existing PFL Structures

Eight states and D.C. have passed PFL laws (RI, CA, NJ, NY, D.C., WA, MA, CT, and OR). While all of these laws cover care for family members to some extent, the eligibility requirements, payment structures, mandates, funding, wage replacement rates, leave lengths, and job protection, among other provisions, vary. Of particular significance are states' differences in program funding. In RI, CA, NJ, NY, WA, MA, and CT, workers cover the full cost of their family leave premiums; in OR, workers and employers share the cost of PFL; in D.C., employers cover the full premium (A Better Balance, 2020).

One significant similarity between many of these programs is their administrative structures. The states who first implemented PFL (CA, NJ, RI, and NY) created the program as an expansion of existing state short-term or temporary disability programs (TDI). Many states, including Louisiana, do not have the same state TDI program to build off of. Regardless, many state legislatures have proposed legislation creating paid family leave provisions, including Louisiana.

Proposed Legislation in Louisiana

Since 2015, two main bills have been presented in the Louisiana Senate that center on paid family leave in Louisiana. Most recently, a proposed bill (SB 186, 2019) entitled the Louisiana Family and Medical Leave Benefits Act (LA FMLBA) was advanced in May 2019 by the Louisiana Senate Labor and Industrial Relations

Committee to "protect employees who need to take leave from their job due to certain family or medical circumstances" by providing a system for paid family and medical leave administered by the state. The proposed law would create a paid leave program in Louisiana, offering a 12-week paid leave benefit to eligible employees. The law, which creates a graduated wage replacement scheme, would offer wage replacement of up to 90%. Under the law, eligible individuals would receive a weekly benefit of 90% of their average weekly wage (AWW) if their AWW is less than 50% of the LA AWW. Any wages over the state AWW would be reimbursed at 50%, with a maximum weekly benefit of the state AWW.

Similar to the Oregon PFL program, the Louisiana program would be funded by both employers and employees; under LA FMLBA, employers would cover 45% of the weekly wage premium, and employees would cover 55% of the weekly wage premium (SB 186, 2019). Similar to most existing statewide PFL programs, the proposed Louisiana program would be funded through payroll contributions that are paid into a "Louisiana Family and Medical Leave Account Fund". While this paper focuses on the provision of leave benefits for family members caring for a new child during the first year after birth or adoption, it is worth noting that the proposed law would also provide benefits for eligible employees who take leave to care for a "family member with a serious health condition", to care for their own serious health condition, or to care for "a military service member who is the covered individual's family member" (SB 186, 2019).

The eligibility requirements outlined in LA FMLBA would allow for approximately 80% of workers in Louisiana to have access to some paid family and medical leave, a massive increase in accessibility to paid leave for workers in Louisiana. While the bill has not yet been passed, it provides an excellent structure for analysis as LA FMLBA's proposed plan is the closest to an enacted PFL policy that Louisiana has seen (Theall & Raabe, 2019).

CHAPTER THREE: THE POTENTIAL IMPACT OF A PFL POLICY ON MOTHERS IN LOUISIANA

This chapter analyzes the potential impact of PFL on mothers' economic and health outcomes in Louisiana, providing an answer to my primary research question: **What is the potential impact of a statewide PFL policy on mothers' economic and health outcomes in Louisiana?** To address this question, I consider three main sets of outcomes: (I) How will a PFL policy impact leave-taking decisions in Louisiana? (II) How will a PFL policy impact economic outcomes for women in Louisiana? (III) How will a PFL policy impact health outcomes for women in Louisiana? First, I outline my methods, specifying how I will generate my predictions using economic and conceptual models, economic theory, and evidence of PFL in California, and adjusting my predictions based on demographic and policy structure differences between California and Louisiana. Then, I outline my predictions, organizing them into three sets of outcomes: leave-taking decisions, economic outcomes, and health outcomes. For each set of outcomes, I begin with a presentation of the model I employ, outlining the assumptions of each model. I follow with my predictions.

Methods

My analysis of the potential impact of a PFL policy in Louisiana will be largely based on evidence of the impact of PFL in California. To form my predictions on the impact of PFL policy on women's economic and health outcomes in Louisiana, I use findings from studies on the impact of California's PFL policy (CA-PFL). While CA-PFL is comparable to LA FMLBA, the policies differ in several ways, most

significantly in their eligibility requirements. In addition to their PFL policy structure, California also differs from Louisiana in terms of their labor force demographics. To extrapolate the observed effects of PFL in California onto my predictions for Louisiana, I make adjustments based on policy-specific differences between CA-PFL and LA FMLBA and on demographic differences between California and Louisiana, highlighting firm characteristics and income levels as two important sources of difference between the observed impact of PFL in California and the potential impact of PFL in Louisiana.

One advantage to using California PFL studies in my analysis is that California is the largest PFL state and has the oldest state-level PFL program in the U.S.. The age of CA-PFL and the size of the state has attracted scholarly attention because longer term effects of the policy can be observed. Additionally, California's large population allows for the state-specific studies to use a larger sample size compared to studies on a smaller PFL state like Rhode Island. Further, California's size and relatively racially diverse population has allowed for studies to find group-specific effects of PFL on mothers from different backgrounds (Stearns, 2015; Han et al., 2009). I use group-specific effects to predict differences between observed impacts in California and potential impacts in Louisiana.

Another advantage to using California PFL studies in my analysis is that California has met significantly more scholarly research than other PFL states, likely as a result of the size and age of the PFL program. Multiple studies have investigated the impact of California PFL on leave-taking and labor market outcomes, including employment, and earnings, and employer responses (Baum & Ruhm, 2016;

Rossin-Slater, et al., 2013; Guendelman et al., 2006; Bartel et al., 2015; Appelbaum & Milkman, 2012; Tisinger et al., 2016). Because there are multiple existing studies examining PFL in California, I do not have to rely heavily on any one study in my analysis.

A third advantage to using California PFL studies to form my predictions is that CA-PFL and LA FMLBA have relatively similar qualifying events for leave, maximum weekly benefit guidelines, and graduated wage replacement schemes. CA-PFL and LA FMLBA are also both structured as state-run insurance systems with a fund created to hold contributions and pay benefits. These similarities in significant aspects of the policies allow me to reliably create predictions of the impacts of LA FMLBA.

A disadvantage of using California PFL studies to form my predictions is that CA-PFL and LA FMLBA have different funding structures. LA FMLBA and CA-PFL are both funded through payroll deductions of around 1%, but CA-PFL is funded solely by employees while LA FMLBA splits funding between employers and employees. Thus, PFL premiums do not directly induce labor demand shifts in California as they would in Louisiana.

Another disadvantage of extrapolating California results onto Louisiana is that LA FMLBA has much stricter eligibility requirements for PFL coverage than California. While CA-PFL offers coverage to all employees who pay into the state unemployment insurance program, regardless of their employer or their hours-worked in the base year, LA FMLBA does not cover employees who work for small firms with less than 20 employees unless they opt-in to cover the entire premium cost. LA FMLBA also has

stricter work-eligibility requirements than CA-PFL, requiring 820 hours worked during the base period, compared to California's $300 requirement; essentially, California essentially only requires 25 hours worked in the base period, as the California minimum wage is $12. Because California's eligibility requirements are minimal, almost all workers are covered. The stricter eligibility requirements with LA FMLBA will leave a higher percentage of the workforce in Louisiana without PFL coverage than in California. With LA FMLBA, at least 17% of the private workforce in Louisiana would not be covered, based on the employer-size requirement alone (U.S. Census Bureau, 2016). As a result of the smaller PFL-covered population in Louisiana, a smaller percentage of the Louisiana workforce will be able to access paid leave than in California. Hence my analysis takes into account the potentially smaller-scale impact of PFL on leave-taking in Louisiana.

While differences between California and Louisiana's PFL policies complicate my analysis, I assume that the policies are similar enough that the direction of PFL's impact on my outcomes of interest will be the same in both California and Louisiana. For example, studies based in California found that PFL increases leave-taking (Bartel et al., 2015; Baum & Ruhm, 2016); thus, I predict that PFL will also increase leave-taking in Louisiana.

To predict the magnitude of the PFL impact on Louisiana leave-taking decisions and economic outcomes specifically, I first illustrate the impact of PFL implementation in economic models, outlining the theoretical impact of the policy on different outcomes. The assumptions of the models are based on evidence from PFL in California and other

PFL states as well as data on the characteristics and preferences of Louisiana workers. Then, I apply group-specific findings from California to similar groups in Louisiana. I do not rely solely on the general findings presented in existing literature on CA-PFL. Rather, I take group-specific findings in California, and compare the groups' relative presence and other state-specific characteristics to estimate whether the impact of PFL in California on different outcomes will be higher, lower, or of a similar magnitude in Louisiana. I also support my predictions with economic theory. My predictions on leave-taking outcomes are presented first, followed by my predictions on economic outcomes because many of my economic predictions are based on my leave-taking predictions.

To draw predictions on the impact of PFL on health outcomes, I employ a conceptual model of the interactions between resource availability, risk factors for morbidity and mortality, and health outcomes for mothers. My predictions on the impact of PFL on health outcomes are based largely upon my predictions for the impact of PFL on leave-taking decisions and economic outcomes, as they are two sources of predicted changes in resource availability for Louisiana mothers. I draw upon evidence of the relationships between changes in resource availability, changes in health promoting behaviors, and changes in health status both within and outside the context of Louisiana mothers. My predictions are supported by existing studies of the impact of PFL on health outcomes, but unlike much of the existing literature on this association, I outline the specific pathways through which PFL will potentially create an impact on the health and economic well-being of Louisiana mothers.

The Potential Impact of a PFL Policy on Mothers' Leave-Taking Decisions

This section outlines my analysis of the potential impact of PFL on leave-taking decisions by mothers in Louisiana. The theoretical impact of PFL implementation on leave-taking decisions is illustrated in Figure 1 below, followed by an outline of my predictions.

Figure 1

A Model of a Mother's Time-Allocation Decisions (Model 1)

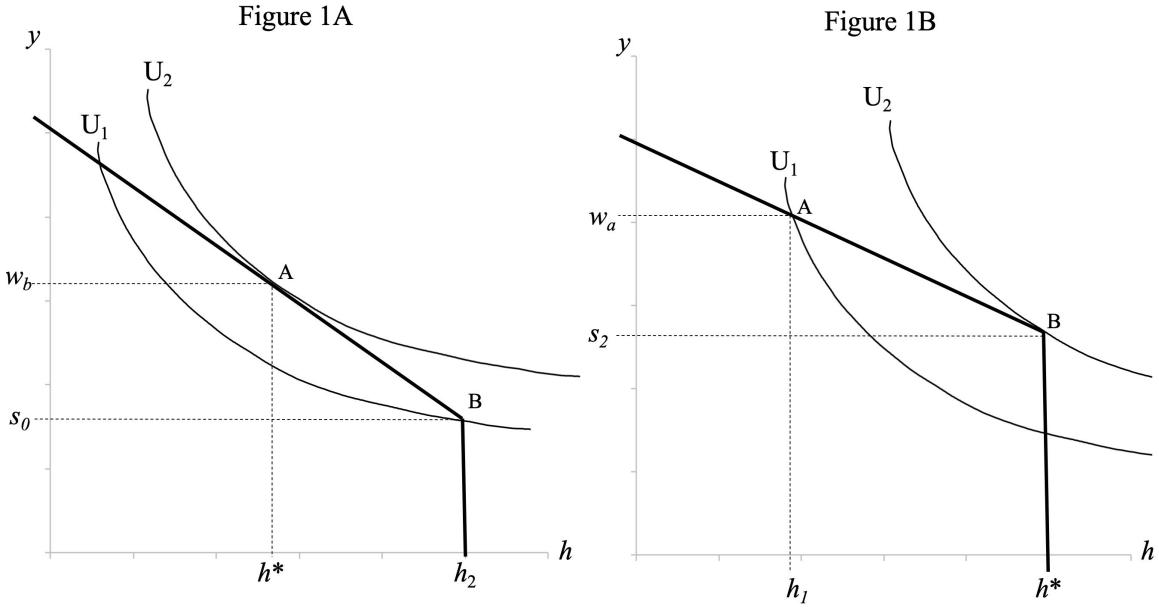

Figure 1 above (Figures 1A and 1B) models a worker's time-allocation decisions between working hours and hours away from work (Model 1). A worker's utility function is modeled by U(y, h) where y is income and h is hours away from work. Both w and h are considered normal goods; a worker prefers more income and more time away from work; $U_1 > 0$, $U_2 > 0$. A worker considers their total time available and allocates it between work (e) and time away from work (h). The workers of consideration in the

model are mothers. A working mother allocates her time between work and time away from work in order to maximize her utility. The exogenous parameters of the model are *w*, her wage rate, and *s*, her other non-labor income which can include her spouse's income, any savings, or a paid leave benefit. Her utility-maximization is constrained by her total time available T, and her income, *y*, where T = *e* + *h* and *y* = *we* + *s*. Thus, she chooses e to maximize U(*we* + *s,* T - *e*). First order conditions for maximization are $w = \frac{U1}{U2} = \frac{MU(time\ away\ from\ work)}{MU\ (income)}$.

I use this model to illustrate leave-taking decisions by Louisiana mothers, assuming that all Louisiana mothers choose their hours worked, *e*, to maximize U(*we* + *s,* T - *e*). I consider two different cases for this model based on differences between values for the exogenous variables, *w* and *s*: Case 1 and Case 2. Case 1, illustrated in Figure 1B represents mothers who choose to allocate all of their time away from work, whether by taking leave or dropping out of the labor force entirely. These mothers do so because either their wage rate, *w*, is sufficiently low or they have a sufficiently high source of non-labor income, *s*, such as an employer-sponsored paid leave benefit, a private TDI benefit, a spouse's income, or savings. In the model, a sufficiently low *w* and sufficiently high *s* would create a corner solution for utility maximization at point B, and allocating all of her time away from work to $h = h_2$ = T, where *e* = 0 would be preferred to any other combination of hours at work and hours away from work. A stay-at-home mom would fit in this case. Mothers in single-income households who tend to have lower sources of non-labor income would likely not fit in this case.

Case 2 represents mothers who cannot maximize their utility by taking unpaid leave or dropping out of the labor force and is modeled by Figure 1A. In this case, a Louisiana mother's non-labor income is sufficiently low, and her wage, sufficiently high, such that she maximizes her utility by allocating some of her time to work, at point A with utility U_2. Pre-PFL, if the Louisiana mother in the model were to allocate all of her time away from work, to take unpaid maternity leave, for example, her allocation shifts to point B, such that $h = h_2 = \text{T}$ and $e = 0$. This decision to take leave would lower her utility to U_1, an undesirable outcome. Hence, the mother in Figure 1A will not take any leave or drop out of the labor force.

PFL impacts the model by increasing s for mothers when they experience a qualifying family event that allows them a wage-replacement benefit during leave. This impact is illustrated in Figure 1B. The wage-replacement benefit increases s from $s0$ pre-PFL, to s_2, with PFL. Assuming the wage-replacement benefit is sufficiently high, some mothers will maximize their utility at a corner solution (point B, Figure 1B) where they allocate all of their time away from work, such that $h = h_2 = \text{T}$ and $e = 0$. This change is especially significant for mothers in Case 2 who, without the PFL benefit, would not be able to maximize their utility if they chose to take leave.

An important assumption of the model is that the PFL policy in Louisiana will only increase s when a mother experiences a qualifying event that enables her to access the PFL benefit. If she has no "need" for the PFL benefit, as defined by LA FMLBA guidelines, the value of the exogenous variable, s, will not be impacted by the policy.

I distinguish between unpaid leave and dropping out of the labor force in this model. If unpaid leave is taken, a mother is assumed to return to her employer after allocating her time away from work for a given family event. Mothers in Case 2 who currently allocate all of their time away from work are not maximizing their utility and are likely only taking unpaid leave or dropping out of the labor force. If a mother does not have access to unpaid leave and allocates all of her time away from work, she drops out of the labor force. If a mother is able to maximize her utility by allocating her time away from work, she will not return to her employer unless her point of utility-maximization changes, as it does when her ability to maximize utility at a corner solution is conditional on having a qualifying reason for leave. Mothers in Case 1 prior to PFL implementation who allocate all of their time away from work to maximize their utility are either taking paid leave or dropping out of the labor force. If they do not have access to paid leave and are still able to maximize their utility at a corner solution, they will likely drop out of the labor force because they can reach a higher level of utility not working than if they allocated some of their time towards work.

Predictions

PFL Will Increase Leave-Taking for Mothers in Louisiana.

I predict that PFL will increase leave-taking by mothers in Louisiana by impacting two main factors that influence leave-taking decisions: leave affordability and leave accessibility.

PFL will make family leave more affordable. Affordability of family leave can be measured by its price. By offering partial wage replacement, LA FMLBA will

effectively decrease the price of family leave to workers. Wage replacement benefits prevent PFL beneficiaries from having to forgo their entire income when they take leave, decreasing the opportunity cost of leave and making leave generally more affordable. As family leave is considered a normal good, when the price of family leave falls, the quantity of family leave demanded increases.

PFL will make family leave more accessible. Access to family leave can be measured by the supply of family leave. By offering PFL coverage to eligible workers across the state, LA FMLBA will increase both the supply of and access to paid family leave. As demonstrated in Model 1, LA FMLBA will also increase family leave accessibility by making family leave accessible to more utility-maximizing mothers. I predict that the wage replacement benefits offered by LA FMLBA will be sufficiently high, such that they will enable some utility-maximizing mothers (in Case 2) to access leave.

My prediction that increases in leave affordability and accessibility will increase leave-taking by Louisiana mothers is supported by a study of leave-taking decisions by Louisiana mothers which found leave affordability and leave accessibility as the top two factors affecting maternity leave decisions among working mothers (Louisiana Department of Health, 2019). My prediction that PFL will increase leave-taking in Louisiana is consistent with the laws of demand and supply as well an existing study and a working paper, both of which have shown increases in leave-taking after PFL policy implementation (Baum & Ruhm, 2016; Bartel et al., 2015).

PFL Will Increase Leave-Taking in Louisiana to a Lesser Extent than in California

I predict that while PFL will increase leave-taking in Louisiana as it did in California, the magnitude of the impact of PFL on leave-taking rates will be smaller in Louisiana due to differences in the demographic characteristics of Louisiana and California and differences between the eligibility requirements of LA FMLBA and CA-PFL. In Chapter Two, I outlined barriers to leave-takeup faced by California and other PFL states. Lack of awareness is the barrier of focus for this analysis due to its demonstrated strong impact on leave-takeup in California (Tisinger et al., 2016). A study of California workers found that college graduates and high-income workers had some of the highest awareness of PFL (Appelbaum & Milkman, 2012). In California, 33.3% of persons over 25 years of age are college graduates; in Louisiana, only 23.7% are college graduates (U.S. Census Bureau, 2018b). Louisiana also has higher rates of poverty, especially of families with young children in poverty (22.1%), than California (10.3%) (U.S. Census Bureau, 2018a). Thus, assuming college education and high incomes are non-state-specific factors that contribute to PFL awareness, I predict that the relatively low levels of educational attainment and high rates of poverty in Louisiana will contribute to a lower level of awareness of PFL in Louisiana compared to that observed in California. I predict that this lower awareness, as a key factor in determining rates of leave-taking, will lead to overall lower leave-takeup rates among eligible Louisiana workers than those observed among eligible California workers.

In addition to lower leave-takeup rates among eligible workers in Louisiana, I predict that the rates of leave-taking will be lower in Louisiana than in California because

LA FMLBA leaves a higher percentage of the workforce ineligible for PFL benefits in Louisiana. As outlined in the Methods section, CA-PFL has low eligibility requirements compared to LA FMLBA. I predict that two key differences between the policies' eligibility requirements will contribute to lower leave-takeup in California. First, LA FMLBA has an hours-worked requirement, unlike CA-PFL which only has a small earnings requirement for eligibility; a worker earning minimum wage ($12/hour in California) is only required to work 25 hours in the base period to be eligible for PFL in California, while workers in Louisiana are required to work 820 hours in the base period to be eligible. Second, unlike CA-PFL, LA FMLBA has an employer-size threshold for worker eligibility. Louisiana workers employed at small firms with less than 20 employees do not have guaranteed eligibility under LA FMLBA; instead, they have to take additional steps to opt-in to the program, if they choose to do so, and cover the entire premium cost to obtain coverage.

Together, these eligibility requirements will likely leave a significant portion of the Louisiana workforce without PFL access even after LA FMLBA implementation. I predict that the employer-size requirement alone will leave up to 18% of Louisiana workers without PFL coverage, as roughly 18% of the private workforce in Louisiana was employed at firms with less than 20 employees in 2016 (U.S. Census Bureau, 2016). The hours-worked requirement will also disqualify some workers from PFL coverage. Because LA FMLBA offers eligibility to a smaller percentage of the state's workforce than CA-PFL, a smaller percentage of workers will be able to access PFL; thus, a smaller

percentage of the workforce will increase their leave-taking after LA FMLBA implementation.

PFL Will Have the Greatest Impact on Leave-taking for the Most Vulnerable Mothers in Louisiana

I predict that PFL policy will increase leave-taking to the greatest extent for the most economically and socially vulnerable populations in Louisiana. Research in California by Rossin-Slater et al. (2013) shows that PFL increased the most for black mothers compared to mothers of other races. PFL increased black mothers' maternity leave taking by 10.6%, a growth of about six weeks (Rossin-Slater et al., 2013). One factor contributing to higher leave-takeup could be the lower opportunity cost of leave experienced by black mothers, due to lower baseline wages and California's graduated wage replacement structure. I estimate the perceived price of PFL to mothers to be equal to the difference between their wage rate and level of wage replacement offered by PFL. As mothers with lower incomes have lower wage rates and would receive higher rates of wage replacement than mothers with higher incomes, I predict that mothers with lower incomes will increase their leave-taking to a greater extent than mothers with higher incomes. In both California and Louisiana, black women have lower incomes than white women on average. In California, black men and women make up approximately 6.16% of the civilian labor force, as of February 2020 (Bureau of Labor Statistics, 2020b). In Louisiana, black men and women make up a much higher 29.27% of the labor force (Louisiana Workforce Commission, 2018). While there are no state level data on black women as a percentage of the total labor force, it is fair to assume that black women

makeup a higher percentage of the Louisiana labor force than the California labor force. If black women are the most responsive to the PFL policy in Louisiana, as they were in California, the PFL policy may have a differentially higher positive impact on leave-taking for black women in Louisiana--a phenomenon which may help PFL address racial inequities in both economic and health outcomes that currently exist for black women in Louisiana.

The Potential Impact of a PFL Policy on Mothers' Economic Outcomes

This section outlines my analysis of the potential impact of PFL on the economic outcomes of mothers in Louisiana, including employment rates, equilibrium wages, and earnings. The theoretical impact of PFL implementation on the labor market is illustrated in Figure 2 below, followed by an outline of my predictions on each economic outcome.

Figure 2

A Model of the Louisiana Labor Market (Model 2)

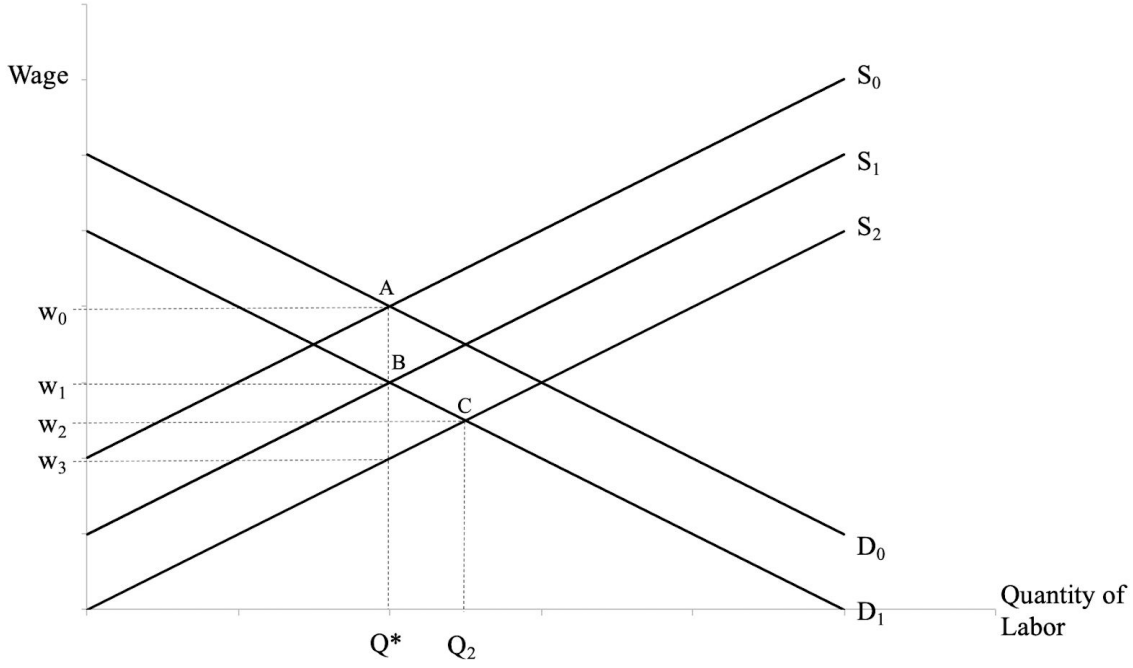

Figure 2 models the Louisiana labor market (Model 2). Employers control the demand curves D0 and D1, and workers control the supply curves S_0, S_1, and S_2. The model assumes the market is currently in equilibrium at wage w_0 with Q* worker, prior to PFL implementation. This is a fair assumption, as the generally accepted natural rate of unemployment in the United States is 4-6%. In February 2020, according to the Bureau of Labor Statistics, Louisiana's unemployment rate was 5.2% (Bureau of Labor Statistics,

2020b). Thus, I assume that Louisiana's labor market is currently in equilibrium, and any level of unemployment currently, is the result of naturally occurring friction in the labor market, and not cyclical economic factors.

S_0 and D_0 are the current supply and demand curves in the labor market. PFL impacts the model by shifting the labor supply and demand curves as employers pay part of the wage premium and employers value the PFL benefit. As demanders of labor, employers will decrease their demand by the amount of their share of the wage premium. As suppliers of labor, workers will increase their supply of labor by their valuation of the PFL benefit. An assumption of this model is that PFL is a valued benefit to employees. This assumption is based on survey data showing high support for PFL and my analysis of the labor supply model (presented in Figure 1) showing that PFL decreases the utility loss of a family or medical event requiring time away from work (GBA Strategies, 2018). Assuming PFL is generally a valued benefit to Louisiana workers, the shift in supply will be positive; the shift in demand will be negative.

My analysis considers two theoretical cases for labor supply shifts in the model. In Case I, workers' valuation of the paid leave benefit is equal to the cost of the benefit to their employers. In Case I, the supply curve shifts from S0 to S1. In Case II, workers' valuation of the paid leave benefit is greater than the cost to their employers. In this case, the supply curve may shift all the way from S_0 to S_2. Each case produces a different equilibrium point in the labor market. The case that prevails in Louisiana will determine the magnitude of the supply shift, and thus the impact of PFL on equilibrium wages and employment rates. Thus, the model can be used to predict changes in equilibrium wages

and employment rates for mothers in Louisiana that will occur as a result of PFL. I assume that despite supply and demand shocks, the labor market will adjust to equilibrium, so the policy will not increase unemployment rates.

Another assumption inherent to this model is that Louisiana workers will bear the cost of the PFL premium in the form of lower equilibrium wages due the decrease in labor demand and the increase in labor supply that will occur as a result of PFL implementation. Regardless of the magnitude of the labor supply and demand shifts, a new equilibrium point will be created in the market, at a lower equilibrium wage rate. The model outlines two potential cases for the magnitude of the labor supply shift in Louisiana; however, either case will result in a decrease in equilibrium wages in the labor market. My predictions on the magnitude of the labor supply shift and changes in wages, employment, and earnings in Louisiana that will result from PFL are outlined below.

Predictions

PFL Will Impact Labor Supply to a Greater Extent than Labor Demand

I predict that PFL will impact labor supply to a greater extent than labor demand in Louisiana based on three analyses. First, I estimate that the magnitude of the shift in labor demand that will occur will approximate the premium cost to employers. Second, I predict that the premium cost to employers will be perceived as relatively small. Third, I predict that labor supply will shift significantly due to workers' high valuation of the benefit. My three analyses producing this prediction are outlined below.

Labor demand will shift by the cost of the PFL premium to firms. PFL can theoretically shift labor demand based on both the implicit and explicit costs of the policy

to employers. I estimate that the implicit costs of PFL to firms in Louisiana will be minimal and close to zero based on the combined positive and negative effects of PFL on firms' productivity. Thus, labor demand will shift only by the amount of the wage premium tax levied on employers. I predict that the extent of both human capital depreciation and productivity losses will depend on the nature of firms, specifically, whether Louisiana employees tend to work in industries that require rapidly developing skill sets or firms that will struggle to adjust operations in an employees' absence, relative to California employees. Theoretically, PFL may also produce productivity gains.

Increases in leave-taking as a result of PFL will lead to some human capital depreciation, as empirical evidence shows that interruptions from work are associated with a decline in skills (Edin & Gustavsson, 2008). Theoretically, when employees return to their positions post-leave, there may be costs incurred by firms associated with re-training the employee or catching them up on any developments that they may have missed during their leave. The more rapidly the firm's operations are developing, the greater the cost of an employee taking leave. Additionally, when a worker is absent, firms will have to cover the tasks of the worker. Firms may have to hire temporary workers who, because they have lower firm specific-capital will be less productive than the worker they are replacing.

These costs associated with human capital depreciation and productivity will vary based on the nature of the firm as well as the amount of leave taken. Tech firms or firms in other rapidly developing industries will face retraining costs to a greater extent than firms in more stagnant industries such as hospitality, as they will likely have a greater

economic burden of re-training and refreshing the skills of their employers returning from leave. In California, a greater percentage of workers are in high-tech industries than in Louisiana or in the nation as a whole (Public Policy Institute, 2010). In Louisiana, leisure and hospitality is the third most represented industry by employment; in California, leisure and hospitality is only the fifth largest industry. Thus, I predict that Louisiana employees will generally face human capital depreciation rates lower than those observed in California.

Theoretically, the high rates of private employment at small firms in Louisiana (37.38%), compared to rates in California (34.53%) and the nation as a whole (33.01) (U.S. Census Bureau, 2016), could be expected to lead to increased productivity losses experienced by Louisiana firms, as smaller firms tend to have less resources to adjust their operations given a regulation. However, empirical evidence from California shows that small firms were actually the most likely to report non-negative effects of PFL on their productivity, profitability, and performance compared to larger firms (Appelbaum & Milkman, 2012). Thus, I project that small business employment rates in Louisiana will actually lead to an even higher rate of reported non-negative effects by firms on average.

In addition to productivity losses, PFL can theoretically produce productivity gains as well if workers' productivity increases as a result of the benefit. Existing evidence of PFL's impact on morale and productivity has shown that losses in productivity have been either balanced or outweighed by gains in productivity for most firms (Appelbaum & Milkman, 2012). Relying on this evidence from existing PFL programs, I project that Louisiana firms will experience similar effects of PFL on their

workers' morale and productivity Thus, most Louisiana firms will experience a neutral effect of PFL on their productivity, and no significant implicit costs. Hence, the magnitude of the demand shift that will occur as a result of PFL will be based solely on the premium cost to employers, which acts as a tax that decreases demand for labor.

The shift in labor demand from PFL will be relatively small. I predict that the magnitude of the demand shift will be relatively small because the premium cost to employers outlined in LA FMLBA is minimal. LA FMLBA creates a funding structure for PFL with employees paying a greater percentage of the premium cost (55%) than employers (45%). The amount of the premium is small at ".064% of the maximum amount of wages subject to the federal Social Security Old-Age, Survivors, and Disability Insurance Tax" (SB 186, 2019). In Louisiana the Average Weekly Wage in the first quarter of 2019 was $954. Those earning the Average Weekly Wage would be charged a modest 61 cents per week to be shared between the worker and their employer. Thus, a firm employing an average Louisiana worker would be charged less than 30 cents per week for the PFL benefit. At a rate of less than 0.03% of wages, the wage premium tax levied on employees is small, and thus, will produce a relatively small shift in labor demand.

The shift in labor supply from PFL will be larger than the shift in labor demand. My prediction on the magnitude of the labor demand shift relative to the labor supply shift is also based on my analysis of the potential impact of PFL on Louisiana workers, who act as suppliers in the labor market. Model 2 assumes that PFL is a valued

benefit, and thus, there will be an increase in labor supply after PFL implementation because the benefit can only be accessed if a worker is in the labor force.

Two key effects of PFL will contribute to Louisiana workers' relatively high valuation of the benefit. First, PFL will allow mothers who have to allocate all of their time away from work due to a qualifying family event, to do so without sacrificing their utility. This effect can be seen in Model 1, for mothers in Case 2 (Figures 1A and 1B), as PFL creates a corner solution for utility-maximization for some women. Data on Louisiana mothers' leave-taking patterns shows that approximately 53.3% of Louisiana mothers took only unpaid leave after a birth (Louisiana Department of Health, 2019). The data source does not distinguish between unpaid leave in which a mother remains employed and unpaid leave in which the mother temporarily drops out of the labor force. As Model 1 assumes unpaid leave is not a utility-maximizing choice, I estimate that these 53.3% of mothers would see some gains in their utility with PFL, and thus, will value the benefit.

PFL also affects labor supply by increasing labor force attachment for some women. Currently, many Louisiana workers do not have access to unpaid leave under the FMLA or the expanded state standards for unpaid leave. As I estimated previously, potentially 18% of Louisiana workers lack access based on the employer size requirement alone. Thus, if they wish to take time off from work to care for a child, they must leave their employer. By offering job-protection and access to leave for more employees, PFL will allow many who previously had to drop out of the labor force to care for their child

to maintain their attachment to the labor force and remain employed. This could increase utility for many mothers who have to take maternity leave.

The combined positive effects of PFL on workers' utility will create a high valuation of the PFL benefit among workers. Thus, the magnitude of the labor supply increase after PFL implementation will be significant, and higher than the minimal labor demand decrease that will occur from the premium tax on employers.

PFL Will Increase Mother's Employment Rates

My prediction on the impact of PFL on mothers' employment is based on economic theory, as outlined in Models 1 and 2, and is supported by existing studies in states and countries that have found associations between leave laws and higher employment rates and labor force attachment by mothers post-childbirth (Rossin-Slater et al., 2013; Baum and Ruhm, 2016; Houser & White, 2012).

I predict that PFL will increase women's employment rates first by shifting the labor market equilibrium to a higher quantity of labor in the market. This increase is due to the combined effects of a relatively small demand shock and a relatively larger supply shock in the labor market, that create a new equilibrium at point C in Model 2 (Figure 2). At point C, Q_2 workers are employed, an increase from the initial equilibrium quantity of workers in the market (Q_0). Inherent to this prediction is my assumption that wages will adjust to the new equilibrium as a result of the policy, and thus, as labor supply increases, employment, rather than unemployment, will increase.

As alluded to in my predictions on leave-taking decisions, I predict that PFL will also increase employment for mothers by allowing mothers who previously would have

had to drop out of the labor force to care for their child due to insufficient leave access to maintain their attachment to the labor force. I predict that the flexibility offered by PFL for mothers balancing their time between work and child care can help to decrease the rates of Louisiana women with young children who report having to quit their job due to child care issues (Louisiana Women's Policy and Research Commission, 2019).

PFL Will Increase Mothers' Earnings

I predict that PFL will have a net-positive impact on earnings for Louisiana mothers, increasing earnings for some and decreasing earnings for others. The impact of PFL on mothers' earnings depends on how mothers currently behave and how PFL will change their behavior. I consider the pre-PFL leave-taking behaviors of three different groups of mothers surrounding "qualifying family events" to demonstrate the impact of PFL on their earnings.

The first group includes mothers who in the absence of PFL will take unpaid leave for a "qualifying family event". This group currently experiences a decline in earnings as a result of a "qualifying family event". Thus, the wage replacement offered by PFL will increase their earnings relative to their earnings without PFL.

The second group includes mothers who in the absence of PFL will drop out of the labor force due to a "qualifying family event". This group currently experiences a decline in earnings as a result of a "qualifying family event". PFL will increase their earnings by decreasing their rates of dropping out of the labor force. An existing study found that maternity leave coverage increased both job retention and women's wages, supporting this prediction (Waldfogel, 1999).

The third group includes mothers who in the absence of PFL will not take any leave for a "qualifying family event". This group does not currently experience a decline in earnings as a result of a "qualifying family event". For mothers in group 3, PFL could actually decrease their earnings by inducing them to take leave. If mothers in group 3 increase their leave-taking as a result of PFL, they will experience a decline in their earnings despite partial wage replacement benefits.

Based on data on current leave-taking patterns by Louisiana mothers, I estimate the first and second groups to represent roughly half of Louisiana mothers (Louisiana Department of Health, 2019). The second group may include the 15% of women with young children in Louisiana who report quitting their jobs due to insufficient child care, or the 16% of women with young children who do not completely drop out of the labor force but reduce their working hours from full-time to part time after giving birth (Louisiana Women's Policy and Research Commission, 2019). Thus, I predict that roughly half of Louisiana mothers will experience either an increase or neutral effect of PFL on earnings. On average, I predict that earnings for mothers in the first and second groups will increase. I estimate the third group to represent approximately 6.5% of Louisiana mothers (Louisiana Department of Health, 2019). This smaller group will experience some decreases in earnings, but because this group represents such a relatively small percentage of Louisiana mothers, decreases in earnings will be outweighed by increases in earnings for the first and second groups. Additionally, if PFL is successful in alleviating some of the child care issues that have led 12% of women with young children in Louisiana to turn down promotions, there will likely be an increase in

earnings even in the longer-term after giving birth (Louisiana Women's Policy and Research Commission, 2019). Thus, I expect PFL will create a net-positive impact on mothers' earnings. This prediction is supported by existing studies that show PFL coverage and leave-taking are associated with increases in women's wages after childbirth (Houser & Vartanian, 2012; Waldfogel, 1998; Boushey, 2008).

The Potential Impact of a PFL Policy on Mothers' Health Outcomes

Model 3: Vulnerable Populations Conceptual Model

The vulnerable populations conceptual model describes the relationship between resource availability, relative risk, and health status, and the ability for those three factors two produce vulnerability in certain social groups (Flaskerud & Winslow, 1998).

Definitions

Resource availability is defined by the "availability of socioeconomic and environmental resources". Relative risk is defined as the "ratio of the risk of poor health among groups who do not receive resources and are exposed to risk factors compared to those groups who do receive resources and are not exposed to these risk factors". Health status is measured by morbidity and mortality rates and prevalence of disease (Flaskerud & Winslow, 1998).

Pathways

There are three main relationships developed in the model (Flaskerud & Winslow, 1998):

1. **Resource availability and relative risk.** Lack of resources increases relative risk.

2. **Relative risk and health status**. Increased exposure to risk factors increases morbidity and mortality; further, morbidity and mortality can increase exposure to risk factors.
3. **Health status and resource availability.** Morbidity and mortality can exacerbate the lack of resources.

Application of the Model

The vulnerable populations conceptual model is an appropriate conceptualization of the impact of PFL on maternal health outcomes in Louisiana because Louisiana mothers are a vulnerable population and because PFL impacts resource availability, relative risk, and health status of mothers. The resources of focus for my analysis are employment, earnings, and time away from work. Employment is of focus because it predicates earnings. Income is of focus as "lack of income or poverty is the most consistent predictor of disease and premature death in the United States and occurs regularly among groups identified as vulnerable to poor health" (Flaskerud & Winslow, 1998). Time away from work is also a resource of focus because it allows mothers to practice health promoting behaviors. The risk factors of focus for my analysis are exposure to stress and mental health issues. The adverse health outcome of focus for my analysis is maternal morbidity, as measured by maternal mental health outcomes and chronic disease. I also consider maternal mortality as a health outcome of focus, although it is likely that PFL will not address the main factors contributing to high mortality rates in Louisiana. Through the model, certain health outcomes can also act as risk factors for

other health outcomes as well as decrease resource availability (Flaskerud & Winslow, 1998).

Louisiana mothers are considered a vulnerable population because, as outlined in Chapter 1, they experience high rates of poverty, maternal mortality, adverse birth outcomes, and diseases that increase risk for adverse health outcomes around childbirth compared to the nation as a whole. Additionally, around 31.5% of Louisiana mothers with children under 18 lead their household with no husband present, implying relatively low rates of family support for many mothers (U.S. Census Bureau, 2012). Families with female householders also tend to have lower access to economic and community resources.

PFL impacts Louisiana mothers in the model by impacting resource availability, relative risk, and health status. PFL will increase resource availability by impacting employment and earnings, as outlined in the economic outcomes section. PFL has been shown to decrease exposure to risk factors for maternal mental health issues and mortality (Stearns, 2015; Anderson & Cacola, 2017; Avendano et al., 2015). PFL also has been shown to improve maternal morbidity through both physical and mental maternal health outcomes (Chatterji et al., 2012; Chatterji & Markowitz, 2012; Staehelin et al., 2007; Dagher et al., 2013; Avendano et al., 2015).

Predictions

PFL Will Improve the Health Outcomes of Louisiana Mothers

My prediction that PFL will improve maternal health outcomes in Louisiana is driven by the vulnerable populations conceptual model (Model 3) which illustrates how

lack of resource availability is driving both the vulnerability and negative health outcomes of Louisiana mothers and is supported by evidence of PFL's impact on resource availability, exposure to risk factors, and health status of mothers in California and other PFL states. I predict that PFL will improve maternal health outcomes by impacting resource availability for Louisiana mothers and, subsequently, their relative risk. Reductions in mothers' risk of mental health issues, chronic illness, and mortality will create better health outcomes for mothers in Louisiana. Existing literature on the impact of PFL has shown that PFL positive impacts maternal mental health (Chatterji et al., 2012; Chatterji & Markowitz, 2012; Staehelin et al., 2007; Dagher et al., 2013; Avendano et al., 2015). Based on my review of the literature, I predict that the pathway through which PFL improves maternal mental health is mainly through reductions in stress associated with childbirth. Thus, the main risk factor faced by Louisiana mothers that will be impacted by a PFL policy is exposure to stress.

PFL will decrease mothers' exposure to stress. Exposure to stress has been identified as a risk factor for preterm birth, mental health issues, mortality, and chronic illness (NIH, 2017; MGH Center for Women's Mental Health, 2005). The projected positive impact of PFL on mothers' leave-taking rates, employment rates, and earnings in Louisiana will lead to an overall increase in resources available to Louisiana mothers that will help mitigate some of the stress mothers currently experience around childbirth.

59% of Louisiana mothers reported financial stress during their pregnancy. Two sources of financial stress by Louisiana mothers were cuts in work hours or pay and job loss (Louisiana Department of Health, 2019). One way that a PFL policy will address

these stressors by offering a job-protection provision to many Louisiana mothers who are not currently covered by the job-protection provision of the FMLA; specifically, at least 46,000 workers could gain access to the job-protection provision surrounding parental leave, simply because LA FMLBA offers expands job-protection to employees at firms with 20-24 employees (U.S. Census Bureau, 2016).

PFL will also address financial stressors by offering women who wish to take leave an opportunity for supplemental income, in the form of a wage replacement benefit, during the period surrounding childbirth. I have predicted that most mothers who take advantage of the PFL benefit will observe an increase in earnings relative to if they took leave before the policy was implemented. These increased earnings for Louisiana mothers will help to relieve some of the financial stress and risk for adverse health outcomes that is currently felt by mothers with lower incomes.

PFL also addresses stress by giving mothers more flexibility in the workplace to balance work and family life. One stressor identified by 27% of Louisiana mothers was that “a family member was sick” during their pregnancy (Louisiana Department of Health, 2019). Outside of their own pregnancy-related leave, PFL can also provide mothers’ with greater flexibility to address the health needs of themselves or their family members throughout their life, reducing some of the emotional and financial stress associated with any serious health events or child care concerns that may occur.

PFL will reduce rates of preterm birth. Exposure to stress is a documented risk factor for preterm birth (NIH, 2017). With high rates of poverty and relatively low access to paid leave benefits, exposure to stress is likely a factor contributing to Louisiana

mothers' high rate of preterm births. I predict that decreasing exposure to stress specifically will reduce the rates of preterm birth. A study by Stearns found evidence that increased paid maternity leave offerings reduced preterm birth rates in the U.S. across all PFL states studied (2015). Assuming the reductions in preterm births observed by Stearns (2015) are truly associated with the availability of PFL rather than other state-specific factors, it is fair to predict that Louisiana will similarly experience reductions in preterm births alongside LA FMLBA. Because preterm birth can be a source of stress for mothers, I also predict that by reducing preterm birth rates, mothers' rates of exposure to stress will be further reduced.

PFL will improve maternal mental health outcomes. Preterm birth is a risk factor for maternal mental health issues including postpartum depression and is associated with adverse mental health effects in mothers (Anderson & Cacola, 2017). Preterm birth also as a stressor alongside financial stress, childcare stress and stressful life events which all increase a woman's risk for postpartum depression (MGH Center for Women's Mental Health, 2005). By addressing financial and emotional stressors that can be associated with childbirth, I predict that PFL can potentially decrease rates of postpartum depressive symptoms in Louisiana women, following my assumptions outlined in Model 3.

PFL may also generally decrease rates of morbidity among mothers in Louisiana. While research on the medium and long-term effects of PFL on maternal health is limited, I predict that the connection between mental health and physical health will enable PFL to improve rates of morbidity among Louisiana mothers. Because poor

mental health is a proven risk factor for many chronic physical health problems (Canadian Mental Health Association, n.d.), I expect that the short-term improvements I predict for maternal birth outcomes and mental health will extend to positive long-term effects on both mental and physical health.

PFL will improve health disparities between mothers of different backgrounds in Louisiana

PFL will improve health disparities between mothers of different races by having a stronger impact on health outcomes for black women than white women. As emphasized in Chapter 2, black mothers in Louisiana are especially disadvantaged in their health outcomes surrounding childbirth; black mothers in Louisiana are faced with a maternal mortality rate nearly four times higher than the U.S. average for all women, and twice as high as the rate for white women in Louisiana. PFL policy will likely improve these disparities, especially the disparity between black and white mothers, in Louisiana because black mothers will likely increase their leave-taking to a greater extent than white women. Further, maternal mental health improvements in Louisiana will likely occur to a greater extent for black mothers and mothers of other disadvantaged backgrounds, as the reductions in preterm birth rates that have been observed alongside PFL in the U.S. have been observed at a greater extent for black mothers than for white mothers (Stearns, 2015). Assuming the reductions in preterm birth rates are felt to the greatest extent by mothers of disadvantaged backgrounds, and they in fact contribute to maternal depression rates, disparities in maternal mental health outcomes in Louisiana may also be reduced as a result of PFL.

Conclusion

This thesis aimed to predict how a paid family leave policy in Louisiana could impact the poor economic and health outcomes currently faced by women and mothers in Louisiana. Based on a qualitative analysis of the relationships between PFL, economic status, and risk factors for disease, as well as comparisons between Louisiana and states with existing PFL programs, it can be concluded that PFL has a strong potential to have a positive impact on the health and economic well-being of mothers in Louisiana. The predictions presented indicate that PFL will have a net-positive impact on firms, households, and the economy as a whole by addressing mothers' exposure to economic stress and decreasing rates of maternal morbidity in Louisiana. Further, PFL is expected to reduce some of the disparities in health indicators faced by women of different races and socioeconomic statuses. There is no evidence that PFL will decrease maternal mortality rates in Louisiana.

The complex interactions between PFL access, economic indicators, and health issues as well as the reliance on case-studies of PFL policy's impact outside of Louisiana limits this thesis from offering specific quantitative estimates of the impact of PFL on mothers. For each of the three models outlined in this thesis, my analysis is based on several simplifying assumptions. For example, an important assumption of the vulnerable populations model (Model 3) is that policy can impact health outcomes by impacting resource availability and exposure to risk factors. Further, this model assumes that increasing resources and decreasing exposure to risk factors will actually decrease rates of adverse health outcomes. However, the documentation of many risk factors is based on

associations and the relative presence of certain diseases among different groups, rather than actual causation. In reality, there are complex causal pathways between resource levels, risk, and actual health outcomes. Having a low socioeconomic status (SES), for example, is commonly cited as a risk factor for many adverse health outcomes including maternal mortality. By increasing one woman's socioeconomic status, her individual risk of maternal mortality is not necessarily lower; rather, there may be other individual factors such as her race, weight, or access to health care that lead her to have an increased risk for mortality. This assumption may limit the validity of my predictions.

Another significant limitation of this thesis is that it relies heavily on economic theory and evidence from contexts outside of Louisiana to project the potential impact of PFL in Louisiana. However, despite an inability to provide exact projections through the scope of this thesis, this work offers a thorough explanation of potential causal pathways that determine the extent of PFL's impact on economic and health outcomes. While existing studies point to associations between PFL and different outcomes, the application of economic and population health models in this thesis offers a unique explanation of how a PFL policy can actually impact the health of mothers. While existing studies point to associations between PFL and different outcomes, this thesis offers an explanation of how those outcomes come about, highlighting policy-level factors that will likely determine a policy's impact.

Maternal mortality is a significant health adverse health outcome faced by Louisiana women that is not addressed in this thesis. While the projected improvements in maternal morbidity postpartum may lead to some reductions in maternal mortality

rates, this thesis fails to find specific pathways through which postpartum leave policies can impact maternal mortality. One reason for this is that most risk factors for maternal mortality precede birth. As LA FMLBA would not specifically address leave access for prenatal care, it is unlikely that PFL would directly impact maternal mortality rates. Further, although I project that PFL will increase mothers' earnings and employment, its unlikely that PFL will significantly change mothers' socioeconomic status or other environmental factors impacting women's health.

Although this thesis fails to project an impact of PFL on maternal mortality rates, the projected positive impacts of PFL on mothers' earnings, employment, and mental health, are all significant value propositions for the implementation of a PFL policy in Louisiana. Recommendations derived from this thesis are as follows:

- Research on the impact of PFL policy in California and other PFL states on maternal mortality rates should be conducted.
- Louisiana legislators should consider a prenatal care leave provision for women.
- Louisiana legislators should consider expanded eligibility requirements such as those under California's PFL policy to maximize the policy's positive impact on parents' leave-taking rates.
- A PFL policy of similar structure to FMLBA should be implemented as soon as possible in Louisiana.

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