A Proposal Essay for Solving Low Fertility Rates in the US

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Abstract

Decling fertility rates have been a global trend for many high-income countries. The US has started to experience a decline in total fertility rates. Fewer people are having children than ever before and has begun a population decline. Total fertility rates have seen a dramatic decrease since 2007 and the baby boomer population has seen a spike within the past 3 years. Factors like a rise in the increased cost for childcare influence the declining fertility rates. This paper will propose New Mexico should implement a PFL as a means of addressing factors contributing to the problem. It will address the problems of economic growth and stability that low fertility rates pose and how the solution will help solve low fertility rates.

Keywords: Low Fertility Rates, Paid Family Leave, US, New Mexico, Policy, Population Decline, Total Fertility Rate, Childcare, Childbearing

Introduction

As of 2020, the US experienced its largest increase in the size of the aging population in ten years. The aging population of the US is continuing to increase without an increase in children to replace the aging population. It is leading to declining fertility rates that pose threats to welfare systems and economic growth. The declining fertility rates are a result of many contributing factors, one of which is the inflated cost of childbearing in the US. This paper proposes that the state of New Mexico adopt a Paid Family Leave policy (PFL) to encourage families to increase the Total Fertility Rate (TFR) because providing paid leave will increase the likelihood of increasing TFR, reduce workforce stagnation, and reduce population decline.

Background

The US census cited that there was an increase of the aging population 38.6 percent from 2010 to 2020. The US has seen the largest increase in the older population 65 and older and the working force remains stagnant (Caplan, 2023). The rise in the increasing aging population is due to the baby boom of the 1940s and the improvement of modern medicine. The baby boom created a substantial number of young and working population meaning the largest population was the working age population. As the baby boomers began to retire it started to flood the rise of the aging population very quickly. With modern medicine many elderly can get access to help and medicine that furthers their life span continuing the increase. The US is now below the replacement rate meaning eventually the US will experience greater population stagnation and decline. The replacement level fertility rate means that if sustained, the population will exactly replace itself each generation. Posing problems with a larger growing aging population the fertility rates are not meeting the replacement rates. For the population to be replaced by each generation, mortality, and migration rates must remain constant (Kearny, Levine, & Pardue 2022). In developed countries, the number of births per woman is an average of 2.1 and differs in countries with high infant and mortality rates. Meaning the population should experience little or no growth. Recent global trends in many developed countries have sunk below the replacement levels. Many countries in Europe and Asia are experiencing fertility rates below 1.5 children per woman.

The US general fertility rate is measured as births per 1000 women 15 to 45 or childbearing years. The decline in birth rates has drastically fallen because of certain demographics of women. The major decline in births per 1000 women was in teens (15-19) "The overall decline was 75 percent" (Kearny, Levine, & Pardue 2022). In 2007 the teen birth rate was 41.5 births per 1000 eventually falling to 15.3 per 1000. The other major decline was for women in their 20s. Age groups of 20 to 24 dropped from 105.4 in 2007 to 62.8 per 1000 in 2020. Women in the age group 25 to 29 dropped from 118.1 in 2007 to 90 per 1000 in 2020. The older age groups on average remained consistent or slightly rose. Many younger women are choosing to have fewer children over their childbearing years and delaying childbearing for older ages.

The US experienced the greatest decline in fertility in 2007 during the Great Recession. Birthrates started increasing till the peak in 2007, falling since. In 2020, during the pandemic rates fell further. A study compared the US fertility rates to other high-income countries to determine if economic or policy environments were the cause of declining fertility rates. "The fact that birth rates are also relatively low in other high-income countries supports the notion that localized factors may not explain a significant portion of the decline" (Kearny, Levine, & Pardue 2022). Suggesting that factors like the Great Recession or Covid are not the main reason for the falling rates.

Problem One: Welfare and Public Assistance Programs

The low TFR rates will pose challenges to public finding assistance programs like Social Security and Medicare. These insurance programs are tax funded by workers to provide benefits to retired or non-workers. The problem arose when the baby boomer population started retiring in mass numbers. The larger the population that uses these programs the increase of strain on the workers, already becoming smaller. “But these future cohorts are just as important toward calculating the coming size of the workforce and the country’s ability to fund social insurance programs” (Kearny & Levine, 2023). The programs require forecasting of the working force size to determine funding for the future. More workers would result in lower costs for each worker even with a larger population using Social Security and Medicare. With less workers and more non-workers it would result in higher costs to fulfill the amount of funding needed to support the programs. The programs are going to be required additional funding with the ever-growing older population. “In the United States, the fiscal support ratio will drop 11 percent between 2010 and 2050 from population aging” (Lee & Mason 2017). The tax revenues on the workers will have to be increased to meet requirements, or the spending for the program will have to be lowered, or combine both, to meet the increased costs from the aging population. The greater the aging population the greater the increase for additional revenue into the program, meaning more money is required from the taxpayer workers. Declining TFR is forecasted to produce less workers paying into the welfare programs. Requiring an increased additional revenue for Social Security.

Problem Two: Economic Growth and Fiscal Stability

The overall economic growth and stability will decline because the smaller workforce creates a smaller output in growth. With a lower and further declining fertility rate it creates a smaller working age population of 24-54. It creates a larger older population compared to the working age creating welfare and economic GDP growth problems. The new workers because of the declining birth rates will create even less workers as the current workers start retiring. There would not be enough workers to replace the mass amount of retiring population. The Gross

Domestic Product (GDP) per capita measures the economic output per person influenced by the productivity of the worker. The GDP per capita will reduce with less workers because the productivity of the workers is lessened with less workers. “That is, increasing the number of workers leads to greater output, and decreasing the number of workers reduces output” (Kearny & Levine, 2023). The GDP is determined by the number of workers to output a higher GDP according to the Solow model. The Solow model created by Robert Solow, a Nobel Prize winning economist, is a model that measures the economic output compared to the country’s input. It attempts to explain long-run economic growth through population growth, savings, investments, capital, depreciation, and technological advancements. The model has provided research that “growth in the size of the workforce has the potential to produce longer-term economic growth” (Kearny & Levine, 2023). The Solow model predicts that the growth of the economy is directly impacted by the number of workers.

Problem Three: Higher Cost to Have Children

Childcare and specifically infant care is expensive and often unaffordable to many families. The cost of childcare programs has increased and are unaffordable. Many factors influence how much childcare programs are costing like external forces of higher inflation or less staffers in childcare. Childcare programs like daycare centers, preschools, babysitting services, and pre-k programs are experiencing staff shortages and cannot raise prices for already struggling families (Childcare Aware of America, 2023). Parents are facing a dilemma in which the output of children has been decreasing and childcare programs are dependent on the kids of the parents. With less children in quality childcare, it creates a demand for higher priced childcare programs. But the childcare services are experiencing staff shortages and underpaid staff. Childcare in New Mexico, specifically infant care is on the lower end of the spectrum. “The average annual cost of infant care in New Mexico is $8,617—that’s $718 per month” (Economic Policy Institute 2020). Infant care is a big expense for families, averaging about 28.3 percent more than some in-state four-year universities. The US Department of Health and Human Services (HHS) childcare becomes affordable if it only costs no more than 7 percent families net income. “By this standard, only 11.1% of New Mexico families can afford infant care” (Economic Policy Institute 2020). With a small portion of the population able to afford children according to the HHS it would cause families to stop having children or a have a smaller number of children. The unaffordable prices deter many young parents from having children.

California’s Policy

A policy that originally started in California aimed to provide paid family leave (PFL) to Californian residents was signed into law in 2002. Under this new senate bill it provided families paid leave for up to 8 weeks with PFL benefits. The Employment Development Department (EDD) of California explains these benefits of the PFL are caregiving for a seriously ill family member i.e., child, parent, grandparents, spouse or registered domestic partner, etc. (California’s Employment Development Department, 2022). It also applies to bonding with a new child in a family whether through birth, adoption, or foster care. Or military assist for qualifying customers whose spouse/partner, parent, child’s military deployment to a foreign country. Under caregiving and child bonding it is not only subject for women like maternal leave it is designed so either the husband or wife can take this paid leave. The PFL provides benefits of 60 percent of a higher income salary and 70 percent for a lower income salary. Also, restrictions apply to the maximum and minimum weekly benefit balances an employee can earn.

When this bill was passed it was under California's State Disability Insurance (SDI). Under SDI it provided disability insurance and PFL. "Both benefits are financed by workers and paid from the SDI Fund" (California's Employment Development Department, 2022). So, the program was funding more than just a specific paid family leave. It also consolidated the taxes of workers in California, so they are only having to pay for one program that is encompassing disability insurance and paid family leave.

This proposal will take many aspects and amend the policy from California. The Californian PFL policy is catered towards the size and population of the state. New Mexico is different to California, so the proposal for this paper needs to be catered towards New Mexico. New Mexico has an overall lower cost of living and cost of infant care compared to California. The average rates for infant care in California are almost double that of New Mexico (Economic Policy Institute, 2020). The amount of wage replacement would be overcompensating for the amount employees must pay in payroll taxes. With the numbers for California, it could be come unfeasible to copy and use exactly for New Mexico. The PFL policy from California has also shown promising data of increases in certain age groups of women. "This statistically significant increase of 3.1 higher order births per 1,000 aged 30-39 females are a 4 percent increase relative to the mean" (Golightly & Meyorhofer, 2022). The data in this study showed a primary increase in births for women in their 30s after the PFL policy was enacted in 2004. It showed a significant increase for women in their thirties with a slight increase for those in their 20s or younger.

Japan's Solutions

Other countries that are suffering from low TFR, Japan, have tried enacting policies to combat the problem. Japan has implemented a series of policies to create positive environments for a better family-work balance. The policies were aimed at improving childcare services, providing incentive for me to become involved in childcare, improved flexible work hours, and improving education and healthcare for families (Boydell, Mori, Shahrook, Gietel-Basten, 2023). These policies have been offered since 1992 with many changes and additions. The current bills include further financial compensation and work flexibility, and a 50 percent monthly salary benefit prior to leave. Note these policies seem to be unsuccessful in solving the low fertility rates. The TFR has risen to 1.43 percent from the lowest of 1.26 percent families (Boydell, Mori, Shahrook, Gietel-Basten, 2023). Japan has stabilized the decline but remains low.

Addressing the financial problems that are contributing to the decline in fertility rates is not the only solution. Enacting policies like these from Japan are only a small factor of the larger contributions. To truly begin a full rise in fertility rates it will need the help of multiple factors like paid leave policies. With evidence from California, it does show that a PFL would increase fertility rates of course not fully restoring fertility rates.

The Proposed Solution

A paid family leave has been implemented in other states and New Mexico could be the next candidate for a paid family leave policy. It is intended that the proposal uses the model of the Californian PFL to create a policy that will work and benefit New Mexico. The policy for New Mexico will be modeled to meet the expectations for New Mexico residents. New Mexico was chosen as the target client because New Mexico is ranked as number 10^{th} in lowest fertility rates (Birth rate by state 2023). New Mexico has 52.9 births per 1000 women. New Mexico was one of the top 10 states that did not have a PFL and will benefit from it. This policy is supposed to allow workers to be able to create income while on leave and encourage women to start having children. New Mexico does not have an SDI program, so the PFL will become its own program and not become an extension with its own funding. The policy will receive funds through payroll taxes and will cover the same benefits for families.

The PFL will help encourage families to have children because they will be able to bond with their children and still provide income. The policy will not be included in a state disability insurance program and will be its own sperate program. It will receive funds in the form of payroll taxes by the workers in New Mexico. The formula to calculate the contribution rate is found in the below cost benefit section. Workers will be provided up to 8 weeks of parental leave for bonding, caregiving, or military assistance. Bond will be available for a new child being welcomed into the family either through birth, adoption, or foster care (California's Employment Development Department, 2022). The policy will also allow eligible applicants to provide caregiving for a seriously ill-child, parent, sibling, grandparent, or spouse/registered domestic partner, parent-in-law, grandchild. Caregiving for the seriously ill: can be considered as at-home care, or patient care in a hospital, hospice, or residential medical facility, and the continuing treatment from a licensed health professional. For military assistance, the applicant must be considered to have a spouse/registered domestic partner, parent, or child apart of military deployment to a foreign country. Qualifying events for military assistance are attending a military supported event, needing financial aid, child/parental care, or assisting a family member on recuperation leave.

The applicant must be eligible to apply for the PFL. The applicant must have a record of sufficient earnings prior applying. The prior earning must be within a 12-month period or “base period” (California’s Employment Development Department, 2022). The employee must also be attached to the labor market. The candidate must be employed, looking/register for work, or on unemployment insurance. If an employee did not contribute to the PFL program via payroll payments from a past or current employer within a 5–18-month period of applying, they would be ineligible. Depending on the applicant's income it will determine the percentage for which they are eligible. An employee earning will depend on the highest quarterly income for the “base period” to determine the weekly benefit amount. The highest quarterly income will be divided by 13 (number of weeks in a quarter) and multiplied by 60 or 70 percent (0.60 or 0.70) and rounded to the nearest tenth.

By allowing parents to receive better payments and benefits to have children it will begin to eliminate one factor that is reducing the TFR. It provides parents with better security knowing that they can better provide for their children. Parents will not have to worry about whether the expensive routine involved with childbearing will be covered by the PFL. When working these jobs having a child or taking care of children would disrupt working. “Access to leave may lower maternal stress during pregnancy, which has been shown to adversely affect child well-being at birth and in later life” (Rossin-Slater & Sterns, 2020). Leaving can enable parents to obtain proper healthcare for infants, improve maternal postpartum physical and mental health, and strengthen the parent’s bond with their child. It also can lower rates of low birthweight and preterm babies. The added wage replacement may be more beneficial and relevant to those who are planning to or have paid the large upfront cost of childbearing. This new policy for New Mexico aims to bring related results from California in hopes to primarily raise the states TFR.

Cost benefit analysis

Employer and Employee Costs:	**Costs 1**	**Cost 2**	**Cost 3**
Employee Leave Compensation (WBA)	Higher Income 60% of paycheck	Lower Income 70% of paycheck	8 weeks of compensation
Employer Temporary Replacement	Replace previous employees' hours	40 hours full-time off	Prop. Hours part-time
	Hire a temporary replacement	Prop. to previous employee wage	Pay based on duration of replacement
Training Temporary Cost	Training time for one employee	Software training	
		Skill training	
		Onboarding	
Productivity loss	Work disruptions	Extra responsibilities	

	Project delays	Delay of projects	Delay in profit for company
Government Costs	**Costs 1**	**Cost 2**	**Cost 3**
Program management	Employers at New Mexico's EDD	35–40-hour week per employee	
	Training management for PFL	35–40-hour week	
Time to pass the Bill	Time for the bill to run through legislation	2 years	
	Vetoes on the bill can delay	Short delay	Long delay
	Governmental employees pay during the legislation		
Tax Implications	Contribution rates	Benefits to workers, administrative, minor changes	1.45 x Disbursements from the Fund – Fund Balance /State Plan Taxable Wages

	Taxable Wage Ceiling	(4 x the Maximum Weekly Benefit Amount x 13) / 0.55	
	Adequacy rates	Determines whether rates need to increase or decrease	
Benefits	**Costs 1**	**Cost 2**	**Cost 3**
	Increase in Employee satisfaction	Reduce stress and increase retention	
	Increase in Health and well being	Benefits for families	Increase fertility.
	Improve family dynamics	Improves parent-child relationships.	Support elderly family care
	PFL will draw people to New Mexico	Policy benefits workers so it increases workers	New Mexico population increases

The Cost Benefit Analysis Explained:

Every employee that is eligible for Paid Family Leave will be granted up to 60-70 percent of their paycheck dependent on the income of the employee. During this time, each employee can be granted up to 8 weeks of paid time off to bond with a new child or other family member with a medical issue.

During this time, the employer will have to factor in the cost of how to fill in the missing position by hiring a temporary replacement. The employer can use an employee in the company to cover the position and compensate the replacement. Or hire an employee outside of the company to replace the employee. Doing this would require the company to pay the temporary replacement wage proportional to the wage employee on leave, or to pay for the duration the employee will be replacing for. Hiring a new temporary employee would require training in potential software, skill training, and onboarding with the company. All of which would take time out of another employee or whoever oversees training.

If the employee is absence it could cause disruptions for the other employees. If a temporary employee is not hired it could cause other employees to pick up the extra work that is not being performed. Projects could be delayed if the employee were working on a project. It can impact the client or stakeholders if projects are not completed within their due dates, costing the company revenue.

For a program like the Paid Family Leave policy, it would need government employees to manage and train for the new policy. The government will have to pay workers in the EDD department and potential new workers. “Our Department is responsible for administering the

Unemployment Insurance (UI), SDI, payroll tax collection, and job training/workforce programs." (California's Employment Development Department, 2022). With the new policy it would need workers to set up the EDD site for eligible employees to be able to find and file applications for this program. It would need employees to manage the new services to provide information and make sure funding for the new program is accurate. Training would also be needed for employees. Both training and employment would be around 35-40 hours a week for the employees.

Before the bill can be enacted and ready for New Mexico workers to register it must go through the state legislation. Doing this will take time to pass through state legislation. A factor that can delay the bill to be passed is if other legislators veto the bill. This could outright prevent the bill from ever passing or it could delay the bill. It could create a short term or long-term delay depending on other factors. It will also have to account for the pay of the legislators and other employees working with the government to pass the bill.

The contribution rates will be determined using the formula in the table. It determines how much taxpayers will be paying as part of their payroll taxes into this program. The equation determines how much the disbursements will be paid to the eligible worker, the administrative staff to run the program, and any other minor changes. The 1.45 variable is used to determine whether the fund of the program retains the year-end reserve of 25-50 percent to the prior year's disbursements. The state fund taxable wages are the wages that contribute to the disbursement. The taxable wage ceiling in the above table determines how much each employee gets paid per week while on leave. The adequacy rate determines how much the funds need to be increased or decreased. If makes sure the rate stays in-between 25-50 percent of the prior year's rate.

If the PFL policy is enacted in New Mexico it will benefit more than just increasing the fertility rates. With the leave policy it will bring better employee satisfaction knowing that they can better their relationship with their family. It will allow families to spend more time bonding with their kids or ill family members. It could potentially reduce parents' stress and increase their retention for their jobs. Along with encouraging families to have children knowing they can spend time meaningful time bonding without having to worry about their job.

Limitations

The suggested proposal comes with limitations that will prevent this proposal from becoming an effective solution to solve low fertility rates. The policy does not account for the limits of any form of rejection of this proposal. If the policy gets vetoed it will not be effective at stopping declining TFR rates. The numbers used in calculating employee cost may be incorrect and ineffective at producing the best product in New Mexico. For the policy to work it will need to be revised and ensure that the prices are precise. This policy will also be ineffective if policies like the PFL are not enacted nationwide. The policy itself will not be effective in increasing nationwide TFR if only a small number of states use this policy. This policy will also not be 100 percent effective in dramatically increasing TFR. Since this policy only aims to solve one of the many factors that reduce TFR, it will not solve those issues that are contributors.

Conclusion

In closing, the low fertility rates will continue to decrease to extremely dangerous levels already seen in other counties. Addressing the issue will require immediate action to limit the factors of low fertility. By adopting a new Paid Family Leave policy in New Mexico, it can serve as supporting factor to address low fertility, and the problems of workforce and population stagnation, and prevent the decline of US population. The implementation of a the PFL policy emerges not only as a helpful measure for families but as a deliberate investment in the long-term sustainability of the state and country.

References

Birth rate by state 2023. (2023). *World Population Review.* https://worldpopulationreview.com/state-rankings/birth-rate-by-state

Boydell, V.90, Mori, R., Shahrook, S., & Gietel-Basten, S. (2023). Low fertility and fertility policies in the Asia-Pacific region. *Global Health & Medicine*. https://www.jstage.jst.go.jp/article/ghm/advpub/0/advpub_2023.01058/_pdf/-char/ja

Caplan, Z. (2023, May 25). U.S. Older Population Grew From 2010 to 2020 at Fastest Rate Since 1880 to 1890. *U.S. Census Bureau*. https://www.census.gov/library/stories/2023/05/2020-census-united-states-older-population-grew.html

Child care aware of America. (n.d.). *Childcare Aware of America*. https://info.childcareaware.org/hubfs/FINAL-Demanding%20Change%20Report-020322.pdf

Childcare costs in the United States. (2020). *Economic Policy Institute.* https://www.epi.org/child-care-costs-in-the-united-states/#/NM

Golightly, E., & Meyerhofer, P. (2022, May 2). Does Paid Family Leave Cause Mothers to Have More Children? Evidence from California. *Journal of Labor Research, 43*(2), 203-238. file:///C:/Users/voelk/OneDrive/Documents/Propossal%20Sources/Does_Paid_Family_Leave_Cause_M.pdf

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Kearney, M. S., & Levine, P. B. (2022). The Causes and Consequences of Declining US Fertility. *Aspen Institute, August*. https://www.economicstrategygroup.org/wp-content/uploads/2022/08/Kearney_Levine_081222.pdf

Kearney, M. S., Levine, P. B., Pardue, L. (2022). The Puzzle of Falling US Birth Rates since the Great Recession. *Journal of Economic Perspectives.* https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.36.1.151

Lee, R., & Mason, A. (2017). Cost of aging -- Finance & Development, March 2017. *International Monetary Fund.* https://www.imf.org/external/pubs/ft/fandd/2017/03/lee.htm

Maya Rossin-Slater, J., 2020. The economic imperative of enacting paid family leave across the United States. *Policy Commons*. https://policycommons.net/artifacts/4580453/the-economic-imperative-of-enacting-paid-family-leave-across-the-united-states/5404092/

Overview of California's Paid Family Leave Program. (2022). *Employment Development Department: State of California.* https://edd.ca.gov/siteassets/files/pdf_pub_ctr/de2530.pdf

Paid Family Leave Benefit Payment Amounts. (n.d). *Employment Development Department: State of California.* https://edd.ca.gov/en/Disability/Calculating_PFL_Benefit_Payment_Amounts