

# How Subsidizing Delayed Parenthood Will Let Children Lead the Way to a Fairer World

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*While the potential for enacting and implementing guaranteed minimum incomes has become increasingly popular in progressive circles, the idea has yet to be put into practice beyond a few small-scale pilot programs. This Article proposes a new guaranteed minimum income designed around an ecologically and environmentally regenerative family planning mode, one that avoids the prohibitive costs of conventional guaranteed minimum income programs.*

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## INTRODUCTION

While the potential for enacting and implementing guaranteed minimum incomes has become increasingly popular in progressive circles, the idea has yet to be put into practice beyond a few small-scale pilot programs. This Article proposes a new guaranteed minimum income (GMI) focused on women’s education, child welfare, and delayed childbearing, thereby creating environmentally and economically sustainable benefits which in turn allays concerns about the prohibitive costs of conventional GMI programs. The Article frames its GMI proposal from the perspective of the future child and explores what entitlements we can create to benefit that cohort of future peoples and a world that puts children first on a fair start to a path forward.<sup>1</sup>

Part I details the unparalleled societal benefits that delayed childbearing yields. Part II describes the potential policy levers that may be pulled to encourage delayed childbearing, among them improved access to contraception tools, expanded education opportunities for women, subsidies for delayed childbearing, and media campaigns raising awareness of the benefits of delayed childbearing. Finally, Part III describes the ideal approach in the form of a new GMI that incorporates

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1. The Article rests on an implicit rejection of the popular normative position that there is a substantive “right” to have children. This position is not strictly wrong, but rather confused to the point of incoherence in that it centers the discussion on the perspective of hopeful potential parents. The Article will take the appropriate perspective for legal analysis—that of *our future children*; however, the argument for that analysis is outside of the scope of the Article itself. For a detailed defense of this position and rebuttal of opposing stances, see Carter Dillard, *Future Children as Property*, 17 DUKE J. GENDER L. & POL’Y 47, 56 (2010) (arguing that the substantive due process right to procreate improperly treats future children as property); Carter J. Dillard, *Rethinking the Procreative Right*, 10 YALE HUM. RTS. & DEV. L.J. 1, 10–11 (2007) (using Lockean principles of natural rights to interpret constitutional and international law to establish optimization of the public good as a necessary condition of any framework of procreative rights); Matthew Hamity et al., *A Human Rights Approach to Planning Families*, 49 SOC. CHANGE 469, 477 (2019) (making the positive argument for a normative model centered on the rights of future children).

a combination of these mechanisms to maximize the effectiveness of this type of programming. Additionally, the article articulates how this proposal will accord with human rights as well as the doctrine of unconstitutional conditions.

The law and policy changes discussed in this Article have exponentially greater impact on things like environmental protection and restoration, eliminating childhood poverty, and reducing economic inequity, than alternative measures.<sup>2</sup> These changes have that impact because they are so fundamental—existentially so—and as the Supreme Court has recognized, laws and policies that determine procreation implicate the highest level of state interest: the interest the state has in its future self.<sup>3</sup> The importance of these issues—how we create future generations—cannot be overstated.

## I. DELAYED PARENTHOOD BENEFITS WOMEN, CHILDREN, THE ECONOMY, AND THE PLANET

### A. *Maximizing Child Welfare and Reducing Generational Income Inequality*

Delaying childbirth yields substantial benefits for children, setting them up for improved cognitive and physical growth, with one study finding that children born to older mothers fare better in terms of both educational outcomes and height in early adulthood.<sup>4</sup> According to an analysis by the Brookings Institution’s Center on Children and Families (the Center), in the United States, delaying childbearing increases children’s later high school and college graduation rates, reduces their likelihood of becoming teen parents themselves, and increases their lifetime income by approximately \$52,000.<sup>5</sup>

This should not be surprising. As the Center points out, these children receive “the benefits of a mother who is older and more prepared to parent.”<sup>6</sup> Indeed, children with older mothers—regardless of their parents’ background, education and finances—have fewer behavioral,

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2. See generally Hamity et al., *supra* note 1; *Fair Start Facts: Facts Supporting Fair Start Family Planning*, HAVINGKIDS, <https://havingkids.org/fair-start-research/> [<https://perma.cc/48B3-CA8G>].

3. Carter Dillard, *Antecedent Law: The Law of People-Making*, 79 MISS. L.J. 873, 880 (2010).

4. Kieron Barclay & Mikko Myrskylä, *Advanced Maternal Age and Offspring Outcomes: Reproductive Aging and Counterbalancing Period Trends*, 42 POPULATION AND DEV. REV. 69, 94 (2016).

5. ISABEL SAWHILL, QUENTIN KARPILOW & JOANNA VENATOR, THE BROOKINGS INST., *THE IMPACT OF UNINTENDED CHILDBEARING ON FUTURE GENERATIONS* 15 (2014).

6. *Id.* at 17.

social and emotional problems.<sup>7</sup> Given the fact that our levels of empathy are largely contingent on the conditions in which we are born and raised,<sup>8</sup> and empathy within a nurturing environment typically leads to higher levels of prosocial behavior, it is all the more important that parents are sufficiently mature and experienced as to be able to provide a nurturing environment that fosters empathy.<sup>9</sup>

The *length* of the delay is also important: the longer a teen delays giving birth (e.g., instead of giving birth at fifteen years old, the teen delays giving birth to nineteen years old), the higher the average family income of the offspring.<sup>10</sup> The psychosocial and educational benefits to children are more pronounced if the parents delay until at least the age of twenty-five,<sup>11</sup> and even more significant if the mothers are over the age of thirty.<sup>12</sup>

There are benefits of delaying childbirth for fathers as well. One study found, controlling for other aspects of sons' socioeconomic background, that sons born to older fathers enjoy significantly higher levels of educational and occupational achievement than do sons born to younger fathers.<sup>13</sup>

Researchers have found that “the differences in when women start families are a symptom of the nation’s inequality—and as moving up the economic ladder has become harder, mothers’ circumstances could have a bigger effect on their children’s futures.”<sup>14</sup> Given that middle- and higher-income families practice delayed childbearing more often than lower-income families, unless there are incentives in place for lower-

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7. Tea Trillingsgaard & Dion Sommer, *Associations Between Older Maternal Age, Use of Sanctions, and Children’s Socio-Emotional Development Through 7, 11, and 15 Years*, 15 EUR. J. DEV. PSYCHOL. 141, 151 (2016).

8. Nancy Eisenberg, Tracy L. Spinrad & Amanda S. Morris, *Prosocial Development*, in 2 THE OXFORD HANDBOOK OF DEVELOPMENTAL PSYCHOLOGY 300, 310 (Philip David Zelazo ed., 2013).

9. Trillingsgaard & Sommer, *supra* note 7, at 143.

10. KRISTIN A. MOORE ET AL., CHILD TRENDS, “WHAT IF” YOU EARNED A DIPLOMA AND DELAYED PARENTHOOD? 2 (2014).

11. Janet B. Hardy et al., *Like Mother, Like Child: Intergenerational Patterns of Age at First Birth and Associations with Childhood and Adolescent Characteristics and Adult Outcomes in the Second Generation*, 34 DEVELOPMENTAL PSYCHOL. 1220, 1226–27 (1998).

12. David M. Fergusson & Lianne J. Woodward, *Maternal Age and Educational and Psychosocial Outcomes in Early Adulthood*, 43 J. CHILD PSYCHOL. & PSYCHIATRY 479, 483–84 (1999).

13. Robert D. Mare & Meei-Shenn Tzeng, *Fathers’ Ages and the Social Stratification of Sons*, 95 AM. J. SOC. 108, 125 (1989).

14. Quoctrung Bui & Claire Cain Miller, *The Age That Women Have Babies: How a Gap Divides America*, N.Y. TIMES (Aug. 4, 2018), <https://www.nytimes.com/interactive/2018/08/04/upshot/up-birth-age-gap.html> [<https://perma.cc/6VE2-ERDG>]; see also David Leonhardt, *Opinion, The American Dream, Quantified at Last*, N.Y. TIMES (Dec. 8, 2016), <https://www.nytimes.com/2016/12/08/opinion/the-american-dream-quantified-at-last.html> [<https://perma.cc/586W-PGNX>].

income families, the intergenerational income gap will continue growing in a self-reinforcing pattern.<sup>15</sup>

*B. Increased Earnings, Education, and Wellbeing for Women Who Delay Childbearing*

Studies have found that when women have children at a young age, they often do not have significant savings, college training, or a career, and pregnancies are more likely unintended.<sup>16</sup> Conversely, delaying motherhood allows women to increase their career earnings by 10 percent per year of delay.<sup>17</sup> That same one-year delay results in a 6 percent increase in overall years of full-time education, as well as a 3 percent increase in women's wage growth over the first fifteen years after labor market entry.<sup>18</sup>

Mothers who delay having their first child until age thirty, and hence tend to have fewer children,<sup>19</sup> have greater economic and professional success.<sup>20</sup> The strain on parents' finances is substantial given that, on average, it costs \$233,610 to raise a child in the United States, including only "major budgetary components" from birth to age seventeen.<sup>21</sup> As expenses increase, many parents must work longer hours to make ends meet. The time stress of raising children is particularly acute for young mothers, with the effects lasting several years.<sup>22</sup>

*C. Environmentally Sustainable Prosperity*

Population growth is a major driver of climate change, as the scale of production required to meet worldwide consumption demand grows over time with population. Had governments more actively worked to curb

15. Heta Pöyliö & Zachary Van Winkle, *Do Parental Resources Moderate the Relationship Between Women's Income and Timing of Parenthood?*, 39 *ADVANCES IN LIFE COURSE RES.* 1, 2 (2019) ("Numerous sociological studies have concluded that higher parental resources are associated with postponed entry into parenthood and a higher probability to remain childless.").

16. See Bui & Miller, *supra* note 14 (noting parents who have children young "are less likely to have significant savings or a college degree and career" and "their pregnancies are more likely to be unintended").

17. Amalia R. Miller, *The Effects of Motherhood Timing on Career Path*, 24 *J. POPULAR ECON.* 1071, 1086 (2011).

18. SAWHILL, KARPILOW & VENATOR, *supra* note 5, at 9.

19. See *infra* note 29 and accompanying text (citing research that supports the hypothesis that a later maternal age at first birth is associated with fewer children overall).

20. Sandra L. Hofferth, *Long-Term Economic Consequences for Women of Delayed Childbearing and Reduced Family Size*, 21 *DEMOGRAPHY* 141, 141 (1984); Trillingsgaard & Sommer, *supra* note 7 at 141 (discussing the effects of older maternal age, use of sanctions, and children's socio-emotional development through 7, 11, and 15 years on both the mother and child).

21. MARK LINO ET AL., U.S. DEP'T OF AGRIC., *EXPENDITURES ON CHILDREN BY FAMILIES*, 2015, at 22 (2017).

22. Hielke Buddelmeyer, Daniel S. Hamermesh & Mark Wooden, *The Stress Cost of Children* 15 (Nat'l Bureau of Econ. Research, Working Paper No. 21223, 2015).

population growth in the 20th century, the threat of climate change could have been, in part, mitigated. While most developing countries with high fertility rates currently have lower emissions per capita today, “consumption [will eventually] explode on the base of a population that is large, but it is by then growing more slowly.”<sup>23</sup> For example, “[t]hroughout the 19th century, the U.S. population grew at rates typical of Africa today. That century of rapid growth helped to make 21st-century America (with 307 million people now) a consumption behemoth.”<sup>24</sup>

In a November 2018 report from thirteen United States federal agencies, scientists predicted that, “[w]ith continued growth in emissions at historic rates, annual losses in some economic sectors are projected to reach hundreds of billions of dollars by the end of the century—more than the current gross domestic product . . . of many U.S. states.”<sup>25</sup> Using an “energy–economic growth model,” researchers showed that “slowing population growth could provide 16–29% of the emissions reductions suggested to be necessary by 2050 to avoid dangerous climate change.”<sup>26</sup> Therefore, targeted policies that help slow population growth in rapidly growing countries and policies that promote delayed childbearing and smaller family sizes in developed countries<sup>27</sup> can both contribute to the partial long-term mitigation of climate change.<sup>28</sup>

As a matter of common sense, delayed parenthood would likely lead to reduced population, since parents would have fewer years left in which

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23. Robert Engelman, *Population and Sustainability: Can We Avoid Limiting the Number of People?*, SCI. AM. (June 1, 2009), <https://www.scientificamerican.com/article/population-and-sustainability/> [<https://perma.cc/8DEM-MFJV>].

24. *Id.*

25. U.S. GLOBAL CHANGE RESEARCH PROGRAM, FOURTH NATIONAL CLIMATE ASSESSMENT: IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES 26 (2018).

26. Brian C. O’Neill et al., *Global Demographic Trends and Future Carbon Emissions*, 107 PROC. NAT’L ACAD. SCI. 17521, 17521 (2010).

27. Paul A. Murtaugh & Michael G. Schlax, *Reproduction and the Carbon Legacies of Individuals*, 19 GLOBAL ENVTL. CHANGE 14, 14 (2009) (“Under current conditions in the United States, for example, each child adds about 9441 metric tons of carbon dioxide to the carbon legacy of an average female, which is 5.7 times her lifetime emissions.”).

28. Moreover, population growth and regulatory noncompliance interact as a sort of vicious cycle, where “[t]he larger the group, the more likely that it contains at least a few bad apples. Even more devastating, people may *expect* that large groups are especially likely to include such defectors, so it may as well be them.” DAVID P. BARASH, *THE SURVIVAL GAME: HOW GAME THEORY EXPLAINS THE BIOLOGY OF COOPERATION AND COMPETITION* 151 (1st ed. 2003); Daniele Nosenzo, Simone Quercia & Martin Sefton, *Cooperation in Small Groups: The Effect of Group Size*, 18 EXPERIMENTAL ECON. 4, 6 (2015) (“[I]f a group contains one non-cooperator (a ‘bad apple’) cooperation will unravel. In a population containing a fixed proportion of non-cooperators larger groups are more likely to unravel.”) Applying this “bad apple” theory, the more the population grows, the less likely we are to believe that our cohabitants on this planet can be trusted to act in an environmentally and socially responsible manner, thereby robbing us of our own motivation to act responsibly and comply with the applicable regulations.

to conceive additional children. Research has repeatedly confirmed this hypothesis, with a later maternal age at first birth being associated with fewer children overall.<sup>29</sup> This finding is in part due to biological reasons, and partly because the longer parents delayed childbearing, the more likely they were to develop interests that compete with the time required for parenthood.<sup>30</sup> Conversely, an increase in teen pregnancies in developed countries, such as the United States, is especially damaging to the environment because, with decades of childbearing years ahead of them, teen parents are more likely to have larger families overall.

#### *D. Economic Feasibility of Guaranteed Minimum Income Program*

Social welfare policy has been around since the passage of the English poor law in 1601.<sup>31</sup> Social programs for child well-being became official United States government policy in 1935 with the passage of the Aid to Dependent Children as part of the Social Security Act of 1935.<sup>32</sup>

Currently, following the 2008 European Commission Recommendation on active inclusion and 2013 European Commission's Social Investment Package, Guaranteed Minimum Income schemes are being implemented in nearly all European countries (except Italy, Greece, and Turkey) in order to eliminate and overcome the problems in conjunction with poverty.

A larger empirical study is required to develop a mechanism design approach coupled with a comprehensive cost-benefit analysis of a Fair Start Guaranteed Minimum Income (FSGMI) per child investments program that incentivizes parental delay. The economic design of the program must take into account the three unique aspects of FSGMI:

The program should, by design, financially incentivize delay in childbearing (a behavioral change), leading to smaller and more stable family units;

The benefits are to be designed such that awards directly reach the recipient children; and

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29. Melinda Mills et al., *Why Do People Postpone Parenthood? Reasons and Social Policy Incentives*, 17 HUMAN REPRODUCTION UPDATE 848, 852 (2011).

30. *Id.*

31. Esra Dundar Aravacik, *Social Policy and the Welfare State*, in PUBLIC ECONOMICS AND FINANCE 1, 7 (Bernur Açıkgöz ed., 2019), <https://www.intechopen.com/books/public-economics-and-finance/social-policy-and-the-welfare-state> [https://perma.cc/HYD3-5DUP].

32. PREMILLA NADASEN, JENNIFER MITTELSTADT & MARISA CHAPPELL, WELFARE IN THE UNITED STATES 4–6 (2013). At its inception, the AFDC program served relatively few—and mostly white—families. *Id.* (“We begin our history in 1935, when the AFDC program—and much of the twentieth-century welfare state—was created. . . . In its early history, Aid to Dependent Children, as it was known prior to 1962, was a relatively minor program, serving primarily white widows. Racially discriminatory practices denied assistance to most needy African American mothers.”).

Various short-run funding strategies will be designed in order to allow the long-run benefits to recover the financing costs. In the long run, the GMI program will pay for itself via optimized use of shared public goods, environmental benefits of reduced population, and social benefits (positive externalities) of increased education and welfare.

Significant economic research has been conducted to quantify the costs and benefits of both European—and other OECD—countries' GMI schemes. Similarly, research on current United States-based means-tested programs—such as SNAP and TANF—and their income thresholds and economic impacts will inform a baseline to understand the expected economic impact of a GMI Fair Start Program.

Building on the existing methodologies, the next step will be to develop the right methodology to accurately compute the economic costs of the program. To do so, it will be necessary to first determine the optimal age range for the potential recipient population, and the required income ranges for transfer thresholds (both quantified at a regional level), both of which are also policy matters and can be programmed as input parameters in the estimation (for counterfactual analysis).<sup>33</sup> The study must also take into account the effects of estimated “income transfers” on income distribution and equilibrium prices, as demand for education and child care-related services will increase.

To estimate the economic benefits of the program to the entire society, the study must include both the benefits of the program that result from increased early childhood investment and educational resources, and the benefits that result from delayed childbearing (and corresponding smaller family size), including reduced environmental impact and a decreased strain on resources. Most of the benefits will unfold in the long-run, and an agent-based microsimulation forecast technique needs to be employed to accurately compute the long-run benefits, as a function of the input parameters.

The empirical study will conclude with design and computation of a self-financing ecosystem created by the FSGMI model. Over time, increased investment in children, along with small family units will generate diverse positive externalities ranging from higher per capita workforce productivity, decreased environmental impact, and reductions in crime. These long-term benefits will be weighed against the ongoing program costs to quantify the long-term impact of a FSGMI program.

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33. A detailed outline of how such estimation could be conducted can be found in the Appendix, *infra* pp. 37–41.

## II. POTENTIAL INVESTMENTS IN DELAYED PARENTHOOD

In light of aforementioned factors, governments around the world have several policy levers to encourage delayed parenthood, including, among others, subsidies, increasing access to family planning, media campaigns, and investment in women's education.<sup>34</sup> In the next sections, we discuss the efficacy of these specific policies.

### A. Fertility Delay Subsidies

Governments have alternately employed subsidies for the purpose of both increasing and decreasing their national fertility rate. Using data from child subsidies in Israel, researchers found a “significant and positive price effect on fertility: the mean level of marginal child subsidy produces a 7.8 percent increase in fertility [rates],<sup>35</sup> with the effect strongest in the bottom half of the income distribution.<sup>36</sup> There is also significant literature on the statistically significant effects of subsidies in many other developed nations, including Canada,<sup>37</sup> France,<sup>38</sup> and Germany.<sup>39</sup>

Several countries have experimented with using subsidies to help decrease fertility rates. For example, in the state of Maharashtra, India, the district government piloted a program that paid 5000 rupees, or about \$106, for couples to wait to have children.<sup>40</sup> However, in general the “literature on the causal effect of financial incentives on fertility has been

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34. See generally Jocelyn Kaiser, *Does Family Planning Bring Down Fertility?*, 333 SCIENCE 548 (2011) (describing various nations' efforts at family planning by focusing on contraceptive access and women's education). While this article focuses on delay, relocation is another lever that could be paired with delay, to great effect. See Nicholas Kristof, Opinion, *A Better Address Can Change a Child's Future*, N.Y. TIMES (Aug. 3, 2019), <https://www.nytimes.com/2019/08/03/opinion/sunday/poverty-seattle.html> [<https://perma.cc/TN7N-8T2R>] (discussing the impacts moving to a better neighborhood can have on a toddler, including dramatic improvements to future economic and educational outcomes).

35. Alma Cohen, Rajeev Dehejia & Dmitri Romanov, *Do Financial Incentives Affect Fertility?*, Abstract (Nat'l Bureau of Econ. Research, Working Paper No. 13700, 2007), <https://www.ncbi.nlm.nih.gov/pubmed/22743293>

36. *Id.* at 4.

37. Kevin Milligan, *Subsidizing the Stork: New Evidence on Tax Incentives and Fertility*, 87 REV. ECON. & STAT. 539, 539–40 (2005).

38. Guy Laroque & Bernard Salanié, *Identifying the Response of Fertility to Financial Incentives*, 29 J. APPLIED ECONOMETRICS 314, 314 (2014).

39. Anna Raute, *Can Financial Incentives Reduce the Baby Gap? Evidence from a Reform in Maternity Leave Benefits 1* (Sch. of Econ. and Fin. at Queen Mary Univ. of London, Working Paper No. 871, 2018).

40. Jim Yardley, *India Tries Using Cash Bonuses to Slow Birthrates*, N.Y. TIMES (Aug. 21, 2010), <https://www.nytimes.com/2010/08/22/world/asia/22india.html> [<https://perma.cc/CUT9-RHXD>].

limited to pro-natalist policies in developed countries and the One Child Policy in the context of developing countries.”<sup>41</sup>

One of the few studies that does look at *fertility-delay* subsidy structure evaluated the Indian government program *Devirupak*. As part of the program, the government sought to lower fertility rates and even out the sex ratio, which was imbalanced due to sex-selective abortions used to ensure the birth of a male child, a practice common in many cultures. To incentivize smaller families and disincentivize sex-selective abortions, the program provided a subsidy worth ten months of average household consumption. While unsuccessful at correcting the sex-selection problem, the policy permanently reduced the number of children women had by 1 percent.<sup>42</sup>

While some scholars and journalists<sup>43</sup> in the United States have proposed subsidies to delay childbearing, the policy has not yet been adopted. On the contrary, the current tax system incentivizes fertility rate increases through child tax credits that may now be leveraged by wealthier parents.<sup>44</sup>

### B. Improved Access to Family Planning Tools

There is a direct link between access to family planning tools and smaller family size. “Typically, the total fertility rate . . . is around six to seven births per woman in countries with no contraceptive use, while fertility is near two births per woman in countries in which the contraceptive prevalence rate . . . among women in union is around 75% (lower in populations with significant resort to abortion).”<sup>45</sup>

In Kenya, fertility dropped from “8 to 4.8 births per woman after the government launched aggressive family planning efforts in the early

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41. S. Anukriti, *Financial Incentives and the Fertility-Sex Ratio Trade-Off*, 10 AM. ECON. J. 27, 28 (2018).

42. *Id.* at 29.

43. RICHARD H. THALER & CASS R. SUNSTEIN, *NUDGE* 236 (2008) (describing and endorsing a program that pays teens one dollar for every day they avoid becoming pregnant); *see also* Erika Christakis, *Want to Prevent Teen Pregnancy? Pay Teens Not to Get Pregnant*, TIME (Mar. 12, 2013), <http://ideas.time.com/2013/03/12/want-to-prevent-teen-pregnancy-pay-teens-not-to-get-pregnant/> [<https://perma.cc/T27Y-GCBP>] (“[I]f we want to get serious about values, we might try an approach with a much more successful track record of behavior change: paying teenagers not to get pregnant. For every person who makes it to age 21 without becoming pregnant or impregnating someone else, the government should dip into the funds we’d otherwise spend caring for infants and teen moms and instead pay a significant cash bonus directly to the young person.”).

44. Katherine M. Hetherington, *Child Tax Credit Now Higher, More Widely Available*, J. ACCT. (June 1, 2018), <https://www.journalofaccountancy.com/issues/2018/jun/child-tax-credit.html> [<https://perma.cc/4F6E-ZWFM>] (reporting that in 2018, the Federal Child Tax Credit phaseout more than doubled for single filers to \$200,000 and nearly quadrupled to \$400,000 for Married Filing Jointly filers).

45. John Bongaarts, *The Effect of Contraception on Fertility: Is Sub-Saharan Africa Different?*, 37 DEMOGRAPHIC RES. 129, 130 (2017).

1980s. In comparison, in culturally and economically similar Uganda, which has a weaker family planning program, fertility has remained high.”<sup>46</sup> A statistical decomposition showed that almost all of the 36 percent decline in the United States adolescent birth rate between 2007 and 2013 was a result of improvements in contraceptive use.<sup>47</sup>

Subsequently, lack of access to family planning has been shown to increase early pregnancies. Another study found that the closing of eighty family planning clinics in Texas increased teen birth rates by 3.4 percent.<sup>48</sup>

### C. Media Campaigns

Experts agree that it will take more than access to family planning, particularly in the developed world, to “help[] people to understand the personal benefits in health and wealth for them and their children of limiting and spacing births” through “role-modeling family planning practices.”<sup>49</sup> Similarly, social scientists agree that these results may be achieved through role modeling and empowerment, rather than

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46. Jocelyn Kaiser, *Does Family Planning Bring Down Fertility?*, 333 *SCI.* 548, 549 (2011); cf. Elina Pradhan, *Female Education and Childbearing: A Closer Look at the Data*, WORLD BANK: BLOGS (Nov. 24, 2015), <http://blogs.worldbank.org/health/female-education-and-childbearing-closer-look-data> [https://perma.cc/BA7X-BDSU] (reporting that global fertility trends were generally down in 2010 as compared to 1980, suggesting factors like access to family planning, in addition to educational attainment, may influence the number of children a woman bears).

47. Laura Lindberg, John Santelli & Sheila Desai, *Understanding the Decline in Adolescent Fertility in the United States, 2007–2012*, 59 *J. ADOLESCENT HEALTH* 577, 577 (2016).

48. Analisa Packham, *Family Planning Funding Cuts and Teen Childbearing*, 55 *J. HEALTH ECON.* 168, 170–71 (2017).

49. WILLIAM N. RYERSON, *Population: the Multiplier of Everything Else*, in *THE POST CARBON READER: MANAGING THE 21ST CENTURY’S SUSTAINABILITY CRISES* 153 (2010); see also Lant H. Pritchett, *Desired Fertility and the Impact of Population Policies*, Summary findings World Bank Office of the Vice President Development Economics, Working Paper No. 1273, 1994) (noting that “despite the obvious role of contraception as a proximate determinant of fertility, the additional effect of contraceptive availability or family planning on fertility is quantitatively small and explains very little cross country variation. These empirical results are consistent with theories in which fertility is determined by parent’s choices about children within the social, educational, economic, and cultural environment that parents, and especially women, face.”); MORAL GROUND: ETHICAL ACTION FOR A PLANET IN PERIL 327–28 (Kathleen Dean Moore & Michael P. Nelson eds., 2010) (emphasizing the importance of personalizing the issue: “It’s easy to think of overpopulation as a moral failing of other people, other religions, other continents. But if you have more than one or two children, overpopulation is a moral problem in your household. No one ‘deserves’ more children than anyone else; in fact, affluent Americans may have difficulty claiming even equal rights to children, given the global impacts of our lifestyles and life spans.”); see generally SARAH CONLY, *ONE CHILD: DO WE HAVE A RIGHT TO MORE?* (2016) (concluding that no one deserves more children than anyone else, and further, making the case that no one deserves to have more than one child).

coercion,<sup>50</sup> focusing instead on cultural shifts and patterns established through intergenerational fertility preferences and social networking.<sup>51</sup>

There is substantial precedent for effectively utilizing role models and media campaigns to shape family planning and fertility preferences, beginning most famously in 1977 with Miguel Sabido's prime-time telenovela, *Accompany Me*.<sup>52</sup> The family planning themed show was hugely successful, resulting in a 33 percent increase in attendance at family-planning clinics and a 23 percent increase in birth control sales, and leading to the development of four additional family-planning soap operas.<sup>53</sup> During the nine-year run of the five programs, population growth in Mexico declined by 34 percent.<sup>54</sup> Sabido's mass media strategy for influencing reproductive behavior has since been successfully replicated in numerous countries the world over, with empirical research on these interventions demonstrating significant shifts in viewers' beliefs about family planning as well as ideal family size.<sup>55</sup> In the United States specifically, the introduction of the MTV Show "16 and Pregnant" led to a more than a four percent reduction in teen births in the eighteen months following the initial airing, which accounted for 24 percent of the overall decline in teen births in that period.<sup>56</sup>

#### D. Female Education

Female educational level is strongly correlated with family size, delayed childbearing, and increased child health. Economic theory suggests that educated women have "higher opportunity costs of bearing children in terms of lost income" and are therefore more likely to delay

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50. Ezra M. Markowitz & Azim F. Shariff, *Climate Change and Moral Judgement*, 2 NATURE CLIMATE CHANGE 243, 245 (2012); John Guillebaud, *Voluntary Family Planning to Minimise and Mitigate Climate Change*, 353 BMJ i2102, 1 (2016) ("Wise and compassionate promotion of contraceptive care and education in a rights based, culturally appropriate framework offers a cost effective strategy to reduce greenhouse gases.").

51. Martin Kolk, Daniel Cownden & Magnus Enquist, *Correlations in Fertility Across Generations: Can Low Fertility Persist?*, 281 PROC. ROYAL SOC'Y 1, 1 (2014).

52. Stuart Basten, *Mass Media and Reproductive Behavior* 5-7 (The Future of Human Reprod., Working Paper no. 7, 2009), <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.701.5228&rep=rep1&type=pdf> [<https://perma.cc/F75B-AFW3>].

53. *Id.*

54. *Id.*

55. See Jennifer S. Barber & William G. Axinn, *New Ideas and Fertility Limitation: The Role of Mass Media*, 66 J. MARRIAGE & FAM. 1180, 1180 (2004) ("Empirical analyses of 1,091 couples in the Chitwan Valley Family Study, using detailed measures of social change from rural Nepal, show that exposure to the mass media is related to childbearing behavior, and to preferences for smaller families, weaker son preferences, and tolerance of contraceptive use."); see also Basten, *supra* note 52, at 6-7 (reporting similar outcomes in countries such as St. Lucia, Tanzania, India, and Brazil).

56. Melissa S. Kearney & Phillip B. Levine, *Media Influences on Social Outcomes: The Impact of MTV's 16 and Pregnant on Teen Childbearing*, 105 AM. ECON. REV. 3597, 3599 (2015).

becoming a mother.<sup>57</sup> In an empirical study conducted in Kenya, researchers found that one additional year of education decreased a mother's chances of giving birth while still a teenager by over 10 percent.<sup>58</sup> Further, the study found that, for women who completed at least a primary school education, each additional year of schooling decreased the probability of becoming a mother by 7.3 percent.<sup>59</sup> By exploiting variations in a compulsory schooling law in Turkey, one study found that finishing primary school reduced teenage fertility by 0.37 births per woman and the incidence of adolescent childbearing by approximately 28 percent.<sup>60</sup>

The research also shows additional social benefits from female education in terms of child health.<sup>61</sup> Using a regression discontinuity approach to demonstrate causality, one researcher found that women with higher levels of education (due to a one-time educational reform) delayed childbearing, had smaller families, and increased investment in their children's healthcare. Specifically, women who experienced the educational reform had 0.52 fewer children by age twenty-eight. The reform also reduced the likelihood of a first birth before age sixteen years by 6 percent. Furthermore, each additional year of maternal schooling increased the likelihood that a trained health practitioner would be present at the birth of the first child by 33 percent, increased the probability of the first-born child receiving the tuberculosis vaccine by 12 percent, and decreased the probability of the first-born child being stunted by 37 percent.<sup>62</sup> The link between the education of women and falling fertility rates is such that the World Bank estimated that, if the educational status of men and women had been equalized thirty years ago, fertility rates today would be nearing the target of population stabilization.<sup>63</sup>

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57. Pradhan, *supra* note 46, at 37.

58. Céline Ferré, *Age at First Child: Does Education Delay Fertility Timing? The Case of Kenya* ii (World Bank Policy Research, Working Paper No. 4833, 2009).

59. *Id.*

60. Pınar Mine Güneş, *The Impact of Female Education on Teenage Fertility: Evidence from Turkey*, 16 B.E. J. ECON. ANALYSIS & POL'Y 259, 260 (2016).

61. Anthony Keats, *Women's Schooling, Fertility, and Child Health Outcomes, Evidence from Uganda's Free Primary Education Program*, 135 J. DEV. ECON. 142, 151 (2018).

62. *Id.*

63. THE WORLD BANK AND THE ENVIRONMENT 83–84 (1993). Opinion is by no means unanimous as to the value of improving women's education and status as means of lowering fertility rate. See Geoffrey McNicoll, Book Review, 20 POPULATION AND DEV. REV. 656, 659 (1994) (reviewing BEYOND THE NUMBERS: A READER ON POPULATION, CONSUMPTION, AND THE ENVIRONMENT (Laurie A. Mazur ed., 1993)) (criticizing Mazur's cross-sectional data on fertility by mother's education, believing the statistical effect to be more likely due to social class); John Knodel & Gavin W. Jones, *Post-Cairo Policy: Does Promoting Girls' Schooling Miss the Mark?*, 22 POPULATION & DEV. REV. 683, 698 (1996) (“[I]n many developing countries and regions the concern should be to raise enrollment ratios and the quality of schooling for all children, and that

### E. New Frontiers: Relocation

Delay in childbirth is the best way to encourage and cooperate with the human right to fair start resources, but *relocation* accounts amongst the many secondary levers for maximizing the impact of fair start resources on a child. Some communities present an objectively better opportunity for family planning purposes than others, and these so-called “Opportunity Zones” are a fruitful avenue for resource maximization in a scarce world.<sup>64</sup> However, just as relocation fills several needs—children’s outcomes are improved across multiple variables, including earnings, incarceration rates, and other adulthood outcomes<sup>65</sup>—it also likely entails certain negative externalities by leaving a gap in the community left behind.<sup>66</sup> These potential impacts are not raised by delayed parenthood and this Article expresses a clear preference for delay and does not support relocation due to these programs presenting significant inequities in programming.

### III. A NEW GMI: GUARANTEED MINIMUM INVESTMENTS PER CHILD AND DELAYED PARENTHOOD

Which of the four policies discussed above—family planning, women’s education, media campaigns, and fertility-delay incentives—is most economically efficient at delaying childbirth?

While there is no definitive economic evidence pointing to one policy as the most efficient, some findings show “the impact from investment in reducing unwanted fertility will be much more immediate and significant

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in most developing countries a specific gender focus is misplaced, or should be given only secondary priority relative to reducing socioeconomic inequality for both sexes.”); *see generally* THE POLITICS OF WOMEN’S EDUCATION: PERSPECTIVES FROM ASIA, AFRICA, AND LATIN AMERICA (Jill Ker Conway & Susan C. Bourque eds., 1993).

64. Press Release, U.S. Dep’t of Treasury, Treasury, IRS Announce First Round Of Opportunity Zones Designations For 18 States (Apr. 9, 2018), <https://home.treasury.gov/news/press-releases/sm0341> [<https://perma.cc/C83W-53Q6>]; Kristof, *supra* note 34.

65. Raj Chetty et al., *The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility*, (Opportunity Insights, Working Paper No. 25147, 2018), [https://opportunityinsights.org/wp-content/uploads/2018/10/atlas\\_paper.pdf](https://opportunityinsights.org/wp-content/uploads/2018/10/atlas_paper.pdf) [<https://perma.cc/8EYN-E379>]; ANNIE E. CASEY FOUND., CHILDREN LIVING IN HIGH-POVERTY, LOW-OPPORTUNITY NEIGHBORHOODS 1 (2019), <https://www.aecf.org/resources/children-living-in-high-poverty-low-opportunity-neighborhoods/> [<https://perma.cc/447A-7CB5>].

66. *See* Nathaniel Hendren, *Effects of Moving to Opportunity: Both Statistically and Socially Significant*, N.Y.U. FURMAN CENT. (May 2016), <https://furmancenter.org/research/iri/essay/effects-of-moving-to-opportunity-both-statistically-and-socially-significant> [<https://perma.cc/V4J2-BYWY>] (explaining why the Equality of Opportunity Project, responsible for developing the Moving to Opportunity experiment and Opportunity Atlas, has not addressed the consequences of relocation on those left behind; it is “not because such effects are unimportant but rather because they are hard to identify empirically given the dispersed nature of the impacts”).

than only investments in education.”<sup>67</sup> Essentially, education for females is most effective when combined with access to family planning services, and could be even more effective if coupled with government subsidies for delayed parenthood. Incentive-based approaches combined with educational counseling (with incentives as low as \$25 weekly) have shown effective in getting pregnant women to quit smoking in the United States.<sup>68</sup> And, while there is still not much empirical research on financial fertility-delay subsidies,<sup>69</sup> economic theory suggests that such incentives could provide an efficient approach to achieving delayed childbearing.

Fertility delay subsidies directly benefit the decision maker (i.e., the mother) at the point of decision. Compare this to adolescent education, which is subject to existing inefficiencies of the education system in general, and therefore yields longer-term and indirect returns.<sup>70</sup>

The target population for fertility-delay subsidies in the United States (i.e., primary childbearing-age females, ages fifteen to thirty-nine years), is approximately fifty-two million. This population is much larger in size than the target group for compulsory education for females (roughly ages five to nineteen), which is about thirty-one million.<sup>71</sup> Therefore, any fixed (and not per capita) investment into fertility delay subsidies will be less costly per recipient, thereby increasing its effectiveness as a policy tool—it is more cost-effective and reaches a wider segment of the population.

Accordingly, this Article proposes a unified approach in the form of a new kind of guaranteed minimum income whereby girls and women receive subsidies for delayed childbearing in the form of college and graduate school scholarships. Under these future children receive a monthly subsidy for their care and future education. The state invests a minimum per-child amount in programs aimed at family planning access and media campaigns that raise awareness of the benefits of delayed parenting.

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67. Leiwen Jiang & Karen Hardee, *Women’s Education, Family Planning, or Both? Application of Multistate Demographic Projections in India*, 2014 INT’L J. POPULATION RES. 1, 1 (2014).

68. Xianglan Zhang et al., *Effects of Incentive-Based Smoking Cessation Program for Pregnant Women on Birth Outcomes*, 21 MATERNAL & CHILD HEALTH J. 745, 746, 750 (2017).

69. See Anukriti, *supra* note 41, at 14–15 (describing one example of an empirical study of fertility-delay subsidies and its effect).

70. See John M. Bridgeland, John J. DeJulio, Jr. & Karen Burke Morison, *The Silent Epidemic: Perspectives of High School Dropouts*, CIVIC ENTERPRISES, 10 (Mar. 2006), <https://docs.gatesfoundation.org/Documents/TheSilentEpidemic3-06FINAL.pdf> [<https://perma.cc/FMM9-9EDB>] (noting that some young people expressed great remorse for having left school, lamenting an inability to plan for the long-term or delay gratification); see also Jill Johnes, Maria Portela & Emmanuel Thanassoulis, *Efficiency in Education*, 68 J. OPERATIONAL RES. SOC’Y 331, 331 (2017) (“For example, the private rate of return to investment in an additional year of schooling in a developed economy such as the United States is of the order of 10% per year” over a lifetime.).

71. LINDSAY M. HOWDEN & JULIE A. MEYER, U.S. CENSUS BUREAU, AGE AND SEX COMPOSITION: 2010, at 4 (2011).

A. *Inadequacies of Traditional GMI: A Case Study of Washington, DC*

Although a global problem, overall income inequality is especially extreme in DC, which is worse than any state in the United States. In fact, DC households in the top 20 percent income bracket have twenty-nine times more income than households in the bottom 20 percent,<sup>72</sup> and white families are, on average, eighty-one times richer than black families.<sup>73</sup> Moreover, the effects of economic inequality persist throughout lifetimes and across generations, with DC having among the lowest economic mobility in the nation.<sup>74</sup> The gap between poor and wealthy children stretches even further, with DC “boast[ing] the highest childcare costs of any state in the country” and “eclips[ing] the next most expensive state, New Jersey, by 39%.”<sup>75</sup>

Recognizing the importance of combatting such gross inequality, Councilmember David Grosso commissioned the Report by District’s Office of the Budget Director on the potential for a GMI program (the Report).<sup>76</sup> The Report concluded that GMI “could provide [DC] with a new, comprehensive tool to alleviate poverty in the city,” and in turn, improve child-wellbeing, family stability, and health outcomes among DC’s residents. Nonetheless, given concern that GMI or some iteration thereof would have a negative impact on DC’s total GDP and employment, the Report recommended refining the proposal before proceeding with any legislation.

The Report arbitrarily limits its consideration of the economic benefits of GMI to increased personal spending. However, a more comprehensive and accurate accounting would include the savings that result from the improved health and safety of the Districts’ residents,<sup>77</sup> such as reduced public expenditure on medical and crime-prevention services.<sup>78</sup> Additionally, as previously discussed, studies have shown that improved access to family planning and education result in smaller families, which

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72. MINAHIL NAVEED, D.C. FISCAL POLICY INST., *INCOME INEQUALITY IN D.C. HIGHEST IN THE COUNTRY* 1 (2017).

73. KILOLO KIJAKAZI ET AL., URBAN INSTITUTE, DUKE UNIV., NEW SCH. & INSIGHT CTR., *THE COLOR OF WEALTH IN THE NATION’S CAPITAL* vii (2016).

74. Raj Chetty & Nathaniel Hendren, *The Impacts of Neighborhoods on Intergenerational Mobility: Childhood Exposure Effects and County-Level Estimates* 56 (May 2015) (unpublished manuscript) (on file with Harvard University & Nat’l Bureau of Econ. Research).

75. SUSANNA GROVES ET AL., OFFICE OF THE BUDGET DIR. OF THE COUNCIL OF D.C., *ECONOMIC AND POLICY IMPACT STATEMENT: APPROACHES AND STRATEGIES FOR PROVIDING A MINIMUM INCOME IN THE DISTRICT OF COLUMBIA* 21 (Feb. 27, 2018).

76. *Id.* at 1.

77. *Id.* at 56 (citing the beneficial impacts of previous GMI on “health, homeownership, and other indicators of well-being”).

78. *Id.* at 21 (“In FY 2016, the District incurred approximately \$2.8 billion in Medicaid expenditures, including approximately \$800 million in local funds.”).

in turn reduces the costs of public services and infrastructure,<sup>79</sup> mitigates the threat of climate change,<sup>80</sup> improves child welfare,<sup>81</sup> and increases the child's likelihood of future economic mobility.<sup>82</sup>

Furthermore, the Report's concern regarding a loss of total GDP and employment is founded upon a conflation of economic growth with economic *prosperity* and *equity*. Empirically, a country's growth rate decreases over time as its economy grows larger. For example, this is why we observe higher growth rates in developing countries. Developing economies will typically grow at high levels until they reach purchasing power parity (adjusted by per-capita GDP) closer to high-income countries.<sup>83</sup> In the United States, incomes per capita tend to be lower in faster growing areas, and unemployment rates tend to be higher. We observe similar patterns in the evolution of cities. Between 2000–09, of the one hundred largest metro areas, those that fared the best had the lowest growth rates. Residents of the slowest-growing metro areas averaged \$8,455 more per capita in personal income than those of the fastest-growing area.<sup>84</sup> Consider also Japan, which is often criticized by the growth fetishists for its declining fertility rate and total GDP when in fact “[s]ince the late 1990s, the growth in Japan’s real GDP *per head* has outperformed every other major economy. And, unlike other major economies, income inequality in Japan has not increased, instead remaining among the lowest in the developed world.”<sup>85</sup>

And yet DC pursued growth above all else. Indeed, while overpopulation is a major cause of homelessness in DC, as well as a major source of GHG emissions, one of the Sustainable DC goals was to

79. See POPULATION MATTERS, IS UNIVERSAL BASIC INCOME SUSTAINABLE? 3–4 (2016) (explaining that population growth increases poverty “as it means that resources used to combat poverty are divided amongst more people, thus creating a vicious cycle”).

80. Seth Wynes & Kimberly A. Nicholas, *The Climate Mitigation Gap: Education and Government Recommendations Miss the Most Effective Individual Actions*, 12 ENVTL. RES. LETTERS 1, 3 (2017); John Guillebaud & Pip Hayes, *Population Growth and Climate Change*, 337 BRITISH MED. J. 247, 247 (2008); DAVID ROSNICK, CENTER FOR ECON. & POLICY RESEARCH, THE CONSEQUENCES OF INCREASED POPULATION GROWTH FOR CLIMATE CHANGE 2–3 (2014).

81. Chinhui Juhn, Yona Rubinstein & C. Andrew Zuppann, *The Quantity-Quality Trade-off and the Formation of Cognitive and Non-cognitive Skills* 10–11 (Nat’l Bureau of Econ. Research, Working Paper No. 21824, 2015).

82. Douglas B. Downey, *When Bigger Is Not Better: Family Size, Parental Resources, and Children’s Educational Performance*, 60 AM. SOC. REV. 746, 760 (1995).

83. Dwight H. Perkins, *Understanding the Slowing Growth Rate of the People’s Republic of China*, 32 ASIAN DEV. REV. 1, 2 (2015).

84. Eben Fodor, *Relationship Between Growth and Prosperity in the 100 Largest U.S. Metropolitan Areas*, 26 ECON. DEV. Q. 220, 226 (2012).

85. Dan McCrum, *Japan’s Economic Miracle*, FIN. TIMES: ALPHAVILLE (April 8, 2018), <https://ftalphaville.ft.com/2018/04/09/1523246400000/Japan-s-economic-miracle/> [<https://perma.cc/TC6V-NXV6>].

increase the DC population by 250,000 by 2032.<sup>86</sup> Fetishizing growth in this way creates a sort of intergenerational Ponzi scheme, where the only group worse off than today's poor are the poor of tomorrow, poised to face not only greater income inequality, but also paralyzing environmental injustice.<sup>87</sup>

*B. Ideal Unified Approach: Using Fertility-Delay Subsidies to Shift the Economic Costs Of Unintended Pregnancies Into Economic Benefits of Delayed Childbearing Via New Guaranteed Minimum Per Child Investments*

Having Kids, a national child-protection organization, urged DC to reexamine the GMI proposal as oriented around a child's right to a minimum level of wellbeing and a fair start in life, through (1) a substantially increased investment in family planning and early childhood education programs,<sup>88</sup> as well as (2) the establishment of a trust fund for each child born to low-income parents, which could then be used by recipients at age 18 years for college or vocational training. Whereas the Report anticipated only moderate and short-lived increases in consumption among low-income households as a result of GMI,<sup>89</sup> investments along these lines will lead to *sustainable* benefits both economically and, as previously discussed, environmentally.

Studies have repeatedly demonstrated the importance of both family planning and early childhood education as means of reducing long-term economic inequality.<sup>90</sup> Similarly, experts have concluded that the creation of trust accounts for babies born to low income families would

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86. The District's own Climate Action Plan concluded that greenhouse gas emissions will rise as a result of population growth. See GOV'T OF D.C., CLIMATE OF OPPORTUNITY: A CLIMATE ACTION PLAN FOR THE DISTRICT OF COLUMBIA 6 (2010) ("[G]reenhouse gas emissions in the District are expected to rise by 14% by 2020 and 35% by 2050 due mainly to population growth.").

87. Francis Dennig et al., *Inequality, Climate Impacts on the Future Poor, and Carbon Prices*, 112 PROC. NAT'L ACAD. SCI. 15827, 15830 (2015).

88. The increased family planning and childhood education funding would require a minimum investment *per child*, ensuring that any population growth would have to account for the corresponding increase of children in need. JULIA B. ISAACS & SARA EDELSTEIN, URBAN INST., UNEQUAL PLAYING FIELD?: STATE DIFFERENCES IN SPENDING ON CHILDREN IN 2013 vi (2017), [https://www.urban.org/sites/default/files/publication/89881/unequal\\_playing\\_field\\_0.pdf](https://www.urban.org/sites/default/files/publication/89881/unequal_playing_field_0.pdf) [<https://perma.cc/LP7W-WSS2>].

89. ANNIE E. CASEY FOUND., *supra* note 65, at 4.

90. See, e.g., Martha J. Bailey, Olga Malkova & Johannes Norling, *Do Family Planning Programs Decrease Poverty? Evidence from Public Census Data*, 60 CESIFO ECON. STUD. 312, 313 (2014) (discussing how family planning programs could raise the income of the average parent, induce greater parental investment in children, and raise the family income of the average child). See generally Alan Aja et al., *From a Tangle of Pathology to a Race-Fair America*, 61 DISSENT 39 (2014).

address one of the major causes of persistent economic inequality: the transfer of wealth between generations.<sup>91</sup>

In the United States, the economic costs of unintended pregnancies are high: they cost the United States \$21 billion in 2010, or an average of \$14,000 per unintended pregnancy. Unintended pregnancies contribute to the high level of childhood poverty in the United States, which currently effects one in five children.<sup>92</sup> In a ranking of thirty-five developed nations according to their levels of childhood poverty, the United States ranked thirty-fourth.<sup>93</sup>

Policies that are primarily driven by productivity and economic growth often ignore social externalities such as earnings inequality and environmental sustainability, and, therefore, are not viable long-term solutions to address complex needs of our society. This is empirically evident by the annual World Happiness Survey conducted by the United Nations,<sup>94</sup> where the United States consistently ranks outside the top ten. Countries that acknowledge and emphasize social policies that take into account externalities, and employ required social support programs, consistently place themselves on top of the list.<sup>95</sup> In other words, traditional growth models could be replaced by a “stable community model, [where] the financial resources formerly required to support growth could be directed to other beneficial investments,”<sup>96</sup> also referred to as a “steady-state economy.”<sup>97</sup>

Thus, rather than focusing on total GDP, the Having Kids GMI proposal shrinks the wealth gap by specifically contemplating (1) household resources per capita, (2) level of access to public services such as health, education, transportation, and (3) above all, the relationship between a child’s fair start in life and their ability to become a successful, productive future citizen and taxpayer. A comprehensive fertility-delay incentive program could have significant economic effects, including an

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91. Aja et al., *supra* note 90, at 42–43.

92. Max Fisher, *Map: How 35 Countries Compare on Child Poverty (the U.S. Is Ranked 34th)*, WASH. POST, (Apr. 15, 2013.), [https://www.washingtonpost.com/news/worldviews/wp/2013/04/15/map-how-35-countries-compare-on-child-poverty-the-u-s-is-ranked-34th/?noredirect=on&utm\\_term=.0f96b50842b4](https://www.washingtonpost.com/news/worldviews/wp/2013/04/15/map-how-35-countries-compare-on-child-poverty-the-u-s-is-ranked-34th/?noredirect=on&utm_term=.0f96b50842b4) [<https://perma.cc/H85W-MZ4Z>].

93. *Id.*

94. JOHN F. HELLIWELL, RICHARD LAYARD & JEFFREY D. SACHS, WORLD HAPPINESS REPORT (2018), <http://worldhappiness.report/ed/2018/> [<https://perma.cc/E9UB-MVDV>].

95. *Id.* at 20 (establishing that the United States ranked eighteenth in the 2018 Report, whereas Finland, Norway, and Denmark occupied the top three of the list).

96. Fodor, *supra* note 84 at 227–28.

97. HERMAN E. DALY, ECOLOGICAL ECONOMICS AND SUSTAINABLE DEVELOPMENT, SELECTED ESSAYS OF HERMAN DALY 27 (2007).

increase in female education,<sup>98</sup> better educational and health outcomes for future children, and decreased greenhouse emissions.

This nationwide proposal, which is not designed for any exclusive group, includes a GMI voucher per child and a children's saving account (CSA) to incentivize delayed, and planned, childbearing.<sup>99</sup> For example, if a woman graduates high school before giving birth, she will receive post-secondary education funding as well as an incentive in the form of a \$2,000 CSA for any future child and \$200/month in basic income for that future child. Over five years, this would total \$14,000 (the price of an unplanned pregnancy in the United States). For each additional year she delays childbirth, these amounts would increase (until a certain age).

The GMI voucher for children could then be used (or directly invested for parents by the government) to finance a number of early childhood interventions proven to yield significant return on investment. In other words, GMI vouchers could then be utilized via a variety of means, such as high-quality child development or moving vouchers, effectively acting as an intergenerational investment tool on behalf of the society as a whole.<sup>100</sup> Studies have shown that "high-quality birth-to-five programs for disadvantaged children can deliver a 13% per year return on investment."<sup>101</sup> Participation in less expensive head start programs have been shown to have long-term effects on children that include "0.29-year increase in schooling, a 2.1 percent increase in high-school completion, an 8.7 percent increase in college enrollment, and a 19 percent increase in college completion."<sup>102</sup> Moving vouchers, as part of the Move To Opportunity (MTO) Program (where families could choose to move to a lower-poverty neighborhood), significantly improved outcomes for children:

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98. "Among dropouts [in the US], 30 percent of girls cite pregnancy or parenthood as a key reason they left school." Olivia Marshall, *The Drop Out Crisis and Teen Pregnancy*, PROGRESSIVE POL'Y (June 29, 2011), <https://www.progressivepolicy.org/blog/the-drop-out-crisis-and-teen-pregnancy/> [<https://perma.cc/Z4NL-ANAX>].

99. Letter from Anne Green, Exec. Dir., Having Kids, to Muriel Bowser, D.C. Mayor, & D.C. Council (Oct. 25, 2018), <https://havingkids.org/wp-content/uploads/2018/10/DC-GMI-letter.pdf> [<https://perma.cc/3NU4-HF3S>].

100. Chetty et al., *supra* note 65, at 6.

101. *Heckman Study: Investment in Early Childhood Education Yields Substantial Gains for the Economy*, INST. NEW ECON. THINKING (Dec. 12, 2016), <https://www.ineteconomics.org/perspectives/blog/heckman-study-investment-in-early-childhood-education-yields-substantial-gains-for-the-economy> [<https://perma.cc/HMZ7-ASTY>] (discussing the findings of Jorge Luis Garcia et al., *The Life-Cycle Benefits of an Influential Early Childhood Program* 54 (Nat'l Bureau of Econ. Research, Working Paper No. 22993, 2016)).

102. Martha J. Bailey, Shuqiao Sun & Brenden Timpe, *Prep School for Poor Kids: The Long-Run Impacts of Head Start on Human Capital and Economic Self-Sufficiency*, Abstract (Nov. 25, 2018) (unpublished article) (available at [http://www-personal.umich.edu/~baileymj/Bailey\\_Sun\\_Timpe.pdf](http://www-personal.umich.edu/~baileymj/Bailey_Sun_Timpe.pdf) [<https://perma.cc/7NXC-FT54>]).

[C]hildren whose families took up the experimental voucher and moved [to a lower-poverty area] when they were young (below age 13, age 8.2 on average) experience an increase in annual individual earnings in early adulthood of \$3,477. This is a 31 percent increase relative to a the control group [in their mid-twenties] mean earnings of \$11,270.<sup>103</sup>

The MTO counseling costs were \$3,783 per family who took up a voucher, compared to a tax revenue gain of \$22,400 for each family with two young children that moved.<sup>104</sup>

Since the current United States Administration has excised any reference to contraception from the revised criteria for Title X grants, it reasonably falls to states, counties, and cities to help make up for the loss of family planning funding. This might include, for example, a long-acting reversible contraception (LARC) pilot program modeled after Colorado's hugely successful LARC program.<sup>105</sup> A similar LARC program is being developed in Virginia.<sup>106</sup> While DC's Medicaid Program, for example, already covers LARCs,<sup>107</sup> the benefits of LARC could be more fully achieved by funding training for providers and raising awareness of the coverage of reversible contraception throughout the community. Additionally, such funding could be allocated to parent education classes beyond those offered in DC's current program (which are limited to teenagers).

Funding for increased per-child investments would be derived in the short-term by lowering the child income tax phase-out threshold to its 2017 levels,<sup>108</sup> and eliminating the additional credit for a third biological child (with corresponding offsets for adoption), supplemented as necessary by income tax increases on the wealthiest residents. In the long-term, the tax base could then shift to contributions from previous

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103. Raj Chetty, Nathaniel Hendren & Lawrence F. Katz, *The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment*, 106 AM. ECON. REV. 855, 873 (Apr. 2016); *see generally*, Chetty et al., *supra* note 65 (identifying that **Error! Hyperlink reference not valid.**the ultimate goal is not to move people, but to account for the fact that the people who surround children impact their long-term outcomes).

104. Chetty, Hendren & Katz, *supra* note 103, at 896.

105. Nadja Popovich, *Colorado Contraception Program Was a Huge Success – But the GOP is Scrapping It*, GUARDIAN (May 6, 2015), <https://www.theguardian.com/us-news/2015/may/06/colorado-contraception-family-planning-republicans> [<https://perma.cc/ZL9C-VWUH>].

106. H.B. 5002, 2018 Special Sess. I (Va. 2018), <https://budget.lis.virginia.gov/item/2018/2/HB5002/Enrolled/1/292/PDF/> [<https://perma.cc/R8WV-FEHJ>].

107. *See generally*, Karen Pazol et al., *Impact of Contraceptive Education on Contraceptive Knowledge and Decision Making*, 49 AM. J. PREVENTIVE MED. S46 (2016).

108. The District currently allows for 40% of the amount allowed by the Internal Revenue Service. D.C. CODE ANN. § 47-1806.04(f)(1)(B) (2019). In 2017, the Federal Child Tax Credit began phasing out at \$55,000 for married couples filing separately; \$75,000 for single, head of household, and qualifying widow or widower filers; \$110,000 for married couples filing jointly. I.R.S. Pub. 972, Cat. No. 26584R (Jan. 23, 2018), <https://www.irs.gov/pub/irs-prior/p972--2017.pdf> [<https://perma.cc/CAJ7-ADJU>].

childhood recipients of the minimum income upon their reaching adulthood and surpassing an income threshold.

*C. Delayed Parenthood Subsidies and the Human Right to Found a Family*

In 2018, while presenting a report on the importance of surrogacy regulation to the Human Rights Council, UN Special Rapporteur Maud de Boer-Buquicchio declared, “[t]here is no right to have a child under international law.”<sup>109</sup> While de Boer-Buquicchio’s statement may seem, at first blush, to be at odds with Article 23(2) of the International Covenant on Civil and Political Rights, which recognizes “[t]he right of men and women of marriageable age to marry and to found a family,” a closer analysis reveals that de Boer-Buquicchio has solid ground on which to make this claim, at least inasmuch as “the right to found a family” does not reasonably establish an absolute “right to have a child.”

As a preliminary matter, unlike other rights contained in the Covenant, the right to found a family can be derogated,<sup>110</sup> and lacks the stipulation common to other rights that it not be unlawfully restricted.<sup>111</sup> The right to “found a family” under the Covenant is even further limited by competing rights and correlative duties as declared in Article 5:

Nothing in the present Covenant may be interpreted as implying for any State, group or person any right to engage in any activity or perform any act aimed at the destruction of any of the rights and freedoms recognized herein or at their limitation to a greater extent than is provided for in the present Covenant.<sup>112</sup>

Chief among these competing rights in the Covenant is article 24(1), which entitles every child “to such measures of protection as are required by [their] status as a minor on the part of [their] family, society and the State.”<sup>113</sup> As the Committee notes in its General Comment on article 6, these “special measures of protection . . . should be guided by the best interests of the child, [and] by the need to ensure the survival and

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109. *UN Expert: Children at Risk of Being ‘Commodities’ as Surrogacy Spreads*, DHAKA TRIBUNE (Mar. 7, 2018), <https://www.dhakatribune.com/world/2018/03/07/un-expert-children-risk-commodities-surrogacy-spreads> [<https://perma.cc/2JS4-C9MA>].

110. International Covenant on Civil and Political Rights, art. 4, ¶ 1, Dec. 19, 1966, 999 U.N.T.S. 171 [hereinafter ICCPR].

111. *See, e.g., id.*, art. 22, ¶¶ 1–2 (stipulating, in the context of “the right to freedom of association with others,” that “[n]o restrictions may be placed on the exercise of this right other than those which are prescribed by law”).

112. *Id.* art. 5; *see also*, G.A. Res. 217 (III) A, Universal Declaration of Human Rights, arts. 29–30 (Dec. 10, 1948) (recognizing that individual rights must necessarily be limited by others’ rights and by the general welfare).

113. ICCPR, *supra* note 110, art. 24, ¶ 1.

development of all children, and their well-being.”<sup>114</sup> The Committee also recognizes in its General Comment that the right to life for children and adults alike “depends on measures taken by States parties to protect the environment against harm and pollution.”<sup>115</sup> Along these same lines, the Bucharest World Population Plan of Action emphasized “the responsibility of couples and individuals in the exercise of this [family planning] right” by taking “into account the needs of their living and future children, and their responsibilities towards the community.”<sup>116</sup>

One such measure that reasonably falls within a state’s power to ensure the welfare of children and the environment, but still in accordance with human rights, would be a subsidy for delayed childbearing. Indeed, the compatibility of state subsidies for fertility reduction with human rights was specifically examined by the 1974 Symposium on Law and Population, which adopted the following pertinent principles:

1. Any benefits or services provided or withheld as incentives or disincentives take into account the value system and mores prevailing in any given society and be planned so as to counteract the practical obstacles facing family planning programmes;
2. Governments adopting programmes of incentives relating to family planning ensure that any benefits or services provided as incentives

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114. Human Rights Comm’n, U.N. Doc. CCPR/C/GC/36 (Sept. 3, 2019), at [https://tbinternet.ohchr.org/Treaties/CCPR/Shared%20Documents/1\\_Global/CCPR\\_C\\_GC\\_36\\_8785\\_E.pdf](https://tbinternet.ohchr.org/Treaties/CCPR/Shared%20Documents/1_Global/CCPR_C_GC_36_8785_E.pdf) [<https://perma.cc/HU7G-ZC2T>].

115. In contrast to the vague and arguably satiable right “to found a family” found in ICCPR art. 23, ¶ 2, the Convention on the Elimination of All Forms of Discrimination Against Women art. 16(e), Sept. 3, 1981, 1249 U.N.T.S. 13 [hereinafter CEDAW] requires signatories to ensure that men and women have “[t]he same rights to decide freely and responsibly on the number and spacing of their children and to have access to the information, education and means to enable them to exercise these rights.” However, the modifier “responsibly” necessarily demonstrates that any such right is not unlimited. *See also* Carter Dillard, *Prospective Parents and the Children’s Rights Convention*, 25 AM. U. INT’L L. REV. 485, 523 (2010) (arguing that “CEDAW does not create any new rights, but rather seeks to bolster rights already provided by the UDHR, ICCPR, and ICESCR. Put more simply, CEDAW should not be interpreted as creating a broader right to procreate for women than that enjoyed by men, but should instead be read as establishing parity between the two genders”). In other words, CEDAW itself recognizes that absolute procreative freedom does not exist in a vacuum, but it fails to meaningfully address the problem. As for nonbinding sources of international law, they, too, appear to implicate a broader procreative right than “founding a family,” but these nonbinding sources also qualify a parent’s right to have as many children as she wishes by specifying the manner in which that right should be exercised. *See* U.N. International Conference on Population and Development, *Rep. of the Int’l Conf. on Population and Dev.*, U.N. Doc. A/CONF.171/13/Rev. 1, at 40 (Sept. 5–13, 1994) (“In the exercise of this right, they should take into account the needs of their living and future children and their responsibilities toward the community.”); *see also* *Final Act of the International Conference on Human Rights*, art. II, ¶ 16, U.N. Doc. A/CONF.32/41 (Apr. 22–May 13, 1968) (emphasis added) (“Parents have a basic human right to determine freely *and responsibly* the number and spacing of their children . . .”).

116. U.N. World Population Conference, *World Population Plan of Action*, ¶ 14(f), U.N. Doc. E/Conf. 60/19, U.N. Sales No. E.75.XIII.3 (Aug. 19–30, 1974).

to family planning be in addition to the benefits and services to which all persons are entitled as basic human rights; and

3. Governments ensure that any benefits or services withheld or withdrawn as disincentives in the context of family planning do not conflict with the enjoyment of basic human rights.<sup>117</sup>

It is clear then that the proposed fertility delay subsidies accord with these principles. Firstly, that the subsidy is an incentive rather than a disincentive is itself significant as “[p]opulation policies that attempt to change fertility levels by incentives that affect desired fertility rather than coercion of actual fertility or fixed family size targets allow families to still achieve their goal by forgoing the incentive.”<sup>118</sup> Additionally, benefits like a college education for parents and future children enhance the basic human rights to which all persons are entitled, as distinguished from the basic family size caps on welfare benefits, which go toward the most basic survival needs. By the same token, the proposed subsidy does not target a specific vulnerable group in the way that family size caps on welfare benefits do, applying instead population-wide.<sup>119</sup> Finally, that the subsidy does not involve actually refraining from procreation altogether, but merely delaying said procreation for the benefit of the child, the parent, and the planet, further supports its basis in human rights.

#### *D. Unconstitutional Conditions Doctrine and Subsidizing Delayed Parenthood*

The unconstitutional conditions doctrine protects constitutional rights by “preventing the government from coercing people into giving them up” through the attachment of burdensome conditions to the attainment of particular benefits.<sup>120</sup> In the context of welfare benefits as limited by family size, courts have been reluctant to find such conditions “coercive,” even though states have specifically expressed their intention to affect procreative decisions of individuals through these conditions. In *Sneed v. Saenz*, the court acknowledged that California’s child exclusion statute was “intended to promote personal responsibility of welfare recipients by discouraging growth in family size while they received public

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117. Luke T. Lee, *Population: The Human Rights Approach*, 6 COLO. J. INT’L ENVTL. L. & POL’Y 327, 337 (1995) (summarizing recommendations from U.N. FUND FOR POPULATION ACTIVITIES, THE SYMPOSIUM ON LAW AND POPULATION: PROCEEDINGS, BACKGROUND PAPERS AND RECOMMENDATIONS 276–77 (1975)).

118. David E. Bloom & David Canning, *Population, Poverty Reduction, and the Cairo Agenda*, in REPRODUCTIVE HEALTH AND HUMAN RIGHTS: THE WAY FORWARD 51, 57 (Laura Reichenbach & Mindy Jane Roseman eds., 2009).

119. *Contra In re Chang*, 20 I. & N. Dec. 38 (B.I.A. 1989) (finding that the Chinese Government’s “one couple, one child” policy was not persecutive on its face).

120. *Koontz v. St. Johns River Water Mgmt. Dist.*, 570 U.S. 595, 604 (2013).

assistance.”<sup>121</sup> Similarly, in *N.B. v. Sybinski*, according to the court, “Indiana hypothesized that the family cap would lead to a reduced childbirth rate. Specifically, the State theorized that reduced fertility would lead to fewer children born into a dependent situation; an increase in work; and more parent time per child.”<sup>122</sup> Moreover, as Justice Powell noted in his concurrence in *Cleveland Board of Education v. LaFleur*: “[C]ertainly not every government policy that burdens childbearing violates the Constitution. . . . Undoubtedly Congress could, [for] example, constitutionally seek to discourage excessive population growth by limiting tax deductions for dependents. That would represent an intentional governmental effort to ‘penalize’ childbearing.”<sup>123</sup>

Setting aside the ambiguity of the concept of coercion and, whether these courts are correct in viewing the child exclusion and family size caps on welfare benefits as providing parents with a “choice,” it is clear that the bar for coercion is high. Hence, the proposed subsidies for merely delaying childbearing, being population-wide in application and unrelated to basic subsistence, would necessarily be permissible conditions under the doctrine.

As discussed above, a cluster of related crucial questions remain to be addressed in future research: Is this merely a policy proposal, or could future children (and hence generations) have a fundamental human right to some level of welfare that would act as overriding countervailing duty on would-be parents and their polities?<sup>124</sup> From a consequentialist perspective, would this proposal override conflicting interests given the efficiency of better family planning, and its interplay with the threat of the climate crisis?<sup>125</sup>

If we value freedom of choice, or consent, as emblematic of personal autonomy, how do we account for the consent of future generations for the influence we have upon them? How do we account for the consent of extant persons to the entry of new persons into the world? How do we account for the degradation of human autonomy from others represented

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121. *Sneed v. Saenz*, 16 Cal. Rptr. 3d 563, 567 (Ct. App. 2004).

122. *N.B. v. Sybinski*, 724 N.E.2d 1103, 1106–07 (Ind. Ct. App. 2000).

123. *Cleveland Bd. of Educ. v. LaFleur*, 414 U.S. 632, 651–52 (1974).

124. Consider an analogy to the right to education, *see* International Covenant on Economic, Social and Cultural Rights, art. 13, ¶ 1 Dec. 19, 1966, 993 U.N.T.S. 3, but note that this Article’s approach might be superior in that we are linking demand for welfare/resources (the creation of the child) to the provision of supply (the obligation on would-be parents and the polity to ensure), in an agreement that acts as an intergenerational social contract to create people in x-level conditions that will ensure those persons’ development. Without this, welfare rights for future children are one-sided demands.

125. *Fair Start Facts: Facts Supporting Fair Start Family Planning*, *supra* note 2.

by the Anthropocene?<sup>126</sup> In other words, if we value personal choice, how do we maximize that for all relevant moral and legal entities, current and future? Is it possible to interpret Rawls' requirement of free and equal people determining the rules under which they will live<sup>127</sup> literally and intergenerationally, which would imply an antecedent norm for the creation of future persons as free and equal, or brought into the world as such?<sup>128</sup> Would that mean that Kelsen was wrong, and that the *grundnorm* would have to be whatever norm leads to the creation of persons?<sup>129</sup>

Assuming certain things, should the creation of humans reduce political autonomy and create political obligation and law?<sup>130</sup> In other words, how do polities/legalities include new members without diluting the authority of other members, thereby excluding them?

These questions are beyond the scope of this article but raise the distinct possibility that the policies proposed herein could help comprise a preemptory norm that, if we value consent as the hallmark of personal sovereignty and thus a necessary and antecedent condition<sup>131</sup> for the legitimation of liberal legal systems, would override conflicting interests. That status as a preemptory norm will have significant ramifications for any system of property entitlements and distribution necessary to fund the GMI programming discussed herein.

#### CONCLUSION

While the potential for enacting and implementing guaranteed minimum incomes has become increasingly popular in progressive circles, the idea has yet to be put into practice beyond a few small-scale pilot programs. This article has proposed a new guaranteed minimum

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126. See Carter Dillard, *The Primary Right*, 29 PACE ENVTL. L. REV. 860, 912–13 (2012) (concluding that there is a primary right to accessing wilderness that is threatened by climate change). If climate change is a threat to each and every person's welfare, have we consented to that threat? If not, how is its imposition upon us not a deprivation of our freedom from others, of our right to be free from an increasingly hazardous climate and all the threats that changing climate causes?

127. See generally John Rawls, *Justice as Fairness: Political not Metaphysical*, 14 PHIL. & PUB. AFF. 223 (1985).

128. See generally Carter Dillard, *Illegitimacy*, WILLAMETTE L. REV. (forthcoming 2020); see also, Carter Dillard, *Becoming Us*, 45 ENVTL. L. REP. 10398, 10399 (2015) (arguing, in the context of the "free and equal" ideal, that there is a "right to Nature as it balances against another right with which it conflicts: the right to have children").

129. See Dillard, *Illegitimacy*, *supra* note 128, at 4 (arguing that "creation norms," such as the right to have children, the duties we owe our children, the duties we owe each other in the act of having children, supersede other norms).

130. For one account of the creation of social obligations, see generally JEAN-JACQUES ROUSSEAU, *THE SOCIAL CONTRACT* (Willmoore Kendall trans., 1988).

131. Dillard, *supra* note 3, at 895.

income focused on women's education, child welfare, and delayed childbearing, thereby creating environmentally and economically sustainable benefits which, in turn, allay concerns about the prohibitive costs of conventional GMI programs.

## APPENDIX

### *Economic Feasibility*

Significant economic research has been conducted to quantify the costs and benefits of both European<sup>132</sup> and other OECD<sup>133</sup> countries' GMI schemes. Similarly, research on current US-based means-tested programs such as SNAP<sup>134</sup> and TANF<sup>135</sup> and their income thresholds and economic impacts will inform a baseline to understand the expected economic impact of a GMI Fair Start Program.

Building on the existing methodologies, the first step is to develop a methodology to accurately compute the economic costs of the program. To do so, it will be necessary to first determine the eligibility conditions: optimal age range for the potential recipient population and the required income thresholds (to be quantified based on recipient location). Both of these eligibility conditions are also policy matters and can be programmed as input parameters in the estimation for counterfactual analysis.<sup>136</sup> Such analysis must also take into account the effects of estimated income transfers on income distribution and equilibrium prices, as demand for education and child care related services will increase. Below is an illustration of how such an estimation can be done:

#### Step 1: Age range determination for recipient children population

Age-range of the recipient children population may vary considering the aim to give every child a fair opportunity. It may be challenging to define the scope of fairness or "a fair opportunity." The efforts to provide a fair opportunity may begin from birth or from primary education, and may also cover university education. In the broader scenario, the duration of the assistance should begin from birth until university graduation. In

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132. ANNE VAN LANCKER, TOWARD ADEQUATE AND ACCESSIBLE MINIMUM INCOME SCHEMES IN EUROPE 30–31 (2015).

133. Jinxian Wang & Olaf van Vliet, *Social Assistance and Minimum Income Benefits*, 18 EUR. J. SOC. SECURITY 333 (2016).

134. GENE FALK & RANDY ALISON AUSSENBERG, CONG. RESEARCH SERV., R42054, THE SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP): CATEGORICAL ELIGIBILITY (2019).

135. Robert A. Moffitt, *The Temporary Assistance for Needy Families Program*, in MEANS-TESTED TRANSFER PROGRAMS IN THE UNITED STATES 291 (Robert A. Moffitt ed., 2003).

136. Similar steps are demonstrated in Carlos Farinha Rodrigues, *The Redistributive Impact of the Guaranteed Minimum Income Programme in Portugal* (Lisbon Sch. of Econ. and Mgmt., Working Paper No. 2004/09, 2004).

the most limited case, it should at least cover primary and secondary education.

Step 2: Required transfer determination based on region,  
education and living cost

In order to determine the amount to be transferred, the conditions which provide a child a fair opportunity have to be identified. In order to get an idea of the amount of annual expenditure made for children, the US Department of Agriculture technical report provides information in detail. According to this report, annual child-rearing expenses vary considerably by household income level and it generally increases with age of the child. Depending on the level of income, annual expenses of a family ranges from \$9,330 to \$23,380.<sup>137</sup> In this report, it is estimated that the cost of raising a child from birth to the age of seventeen years costs \$233,610 to a middle-income family living in the USA.<sup>138</sup> The cost breakdown presented in the report are as follows: 29% housing, 18% Food, 16% Child Care & Education, 15% Transportation, 9% Healthcare, 7% Miscellaneous (consists of personal care items, entertainment and reading materials) and 6% clothing.<sup>139</sup>

Step 3: Threshold Income range determination for target  
recipient population

GMI programs implemented worldwide are means-tested. Although the level of income plays a significant role in determining the need for GMI, there are generally other variables such as age, the size of the family, disability, and sickness. In case of FSGMI, poverty threshold may be an appropriate starting point when determining income threshold since poverty line is the minimum income level which is considered adequate to fulfil the necessities of life in a particular country. In 2017, poverty threshold for a family of four was determined as \$24,600 in the US.<sup>140</sup>

137. See LINO ET AL. *supra* note 21, at ii.

138. *Id.*

139. *Id.* at 11. Economic Security Project conducted a study, in collaboration with the Urban Institute and Tax Policy Center, and evaluated the costs associated with a hypothetical revised version of the current earned income tax credit by increasing benefits for many people, expanding eligibility for the credit, and paying the credit in advance through monthly payments of up to \$4,000 annually to single workers and \$8,000 for married couples, resulting in an estimated cost about \$2.5 trillion over a ten-year budget window. ELAINE MAAG ET AL., TAX POL'Y CTR., EXPANDING THE EARNED INCOME TAX CREDIT: THE ECONOMIC SECURITY PROJECT'S COST-OF-LIVING REFUND, **Error! Hyperlink reference not valid.**<https://www.taxpolicycenter.org/publications/expanding-earned-income-tax-credit-economic-security-projects-cost-living-refund/full> [<https://perma.cc/U83P-XKFG>].

140. 2017 *Poverty Guidelines*, OFFICE OF THE ASSISTANT SEC'Y FOR PLANNING AND EVALUATION, <https://aspe.hhs.gov/2017-poverty-guidelines#thresholds> [<https://perma.cc/QPY5-F6TA>].

Below the poverty line, FSGMI may be necessary to provide to a child in order to ensure his or her fair start. However, this is yet another policy parameter that can be determined based on multiple other factors.

Step 4: Effects of estimated income transfer on equilibrium prices and labor markets (feedback to Step 1)

Economic theory would predict that an increase in the supply of funds in the hands of families who have children in need would indeed increase the demand for relevant goods and services, such as housing, education, and better food. This increase in demand will also create an increase in the market prices, at the very least in the short term.

However, it is important to acknowledge this income transfer scheme will exhibit self-correcting behavior in the long term. Because FSGMI allows developing healthier family planning habits for the recipient generation, it is expected to reduce the number of eligible children population over the long-term. Therefore, one would expect a significant decline on equilibrium demand and prices for these goods and services in the long-run.

In other words, since parental delay is a pre-condition for FSGMI eligibility (as a result of optimal mechanism design perspective, which is not discussed in this study in detail), with the use of a child-centered model, the demand generated through providing FSGMI shall be fully or partially offset by the reduced population of children in the long-run.

GMI transfers would also inevitably affect the labor markets. On the supply side, there would be an upwards push in the long term, because the budget constraint for low income earners (GMI recipients) would loosen up due to increasing net income, elevating negotiation power for wages, and downwards-shifting labor supply. Under such a scenario, theory would suggest an increase in wages for low income earners, as businesses now have to offer more to entice workers with elevated income. On the demand side, the answer depends on the exact funding mechanism chosen for GMI (taxing personal, capital, or business income). This is because most wage offerors are net losers of the GMI transfer scheme in the short run, and they will attempt to resist to such upwards push in the short-run, but respond to changes in demand in the long-run.

Relatedly, minimum wages are likely affected from such market movements in a similar manner, but still determined by policy decisions. Political outcomes don't always respond to market needs in the short term.

FSGMI is also likely alter the long-term distribution of labor force skill levels by increasing the average skill level and leading to a more even distribution of skill across income levels. This transformation will

increase costs to businesses associated with hiring high-skill workers, while increasing the costs for hiring low-skilled workers in the long-run.

Step 5: Designing a self-funding program-transfer ecosystem to generate the required funds

There will be significant costs associated with providing an FSGMI for all children in need, especially given the observed income distribution characteristics in the world. However, as explained above in detail, there are a number of social welfare programs already in place that support families and children in need. Therefore, FSGMI can at least be partially funded by the existing channels of federal sources.

Whether such funds are collected by governing bodies in forms of taxes and redistributed, or directly through peer-to-peer transfers, these transfers can serve as intergenerational loans, where all positive externalities associated with such transfers will pay indirectly through reduced population rates and efficient future use public goods (primarily global climate and supply of limited resources on earth). Therefore, the program provides a strong self-funding mechanism in the long-run. In essence, this mechanism is very similar to student loans, where upfront costs are overcome by the future stream of elevated income.

Moreover, overpopulating the earth is causing major ecological problems, which in turn impose insurmountable economic costs for future generations—assuming recoverability of resources under weak sustainability models.<sup>141</sup> Among them, climate crises can be considered as the most important since it affects the home of both current and future generations. Using FSGMI can help us invest in the long-term welfare of the society by creating a more aware, better educated, and better planned next generation, in return alleviating expected future costs of climate crises we will need to face eventually.<sup>142</sup>

These steps outlined above only provide a very preliminary roadmap for the major factors that need to be considered when discussing GMI programs, and their expected consequences from the economics perspective.

To estimate the economic benefits of the program to the entire society, a comprehensive study must include both the benefits of the program that result from increased early childhood investment and educational resources, and the benefits that result from delayed child-bearing (and

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141. Jérôme Ballet, et al., *Weak Sustainability Versus Strong Sustainability*, UNITED NATIONS: SUSTAINABLE DEV., <https://sustainabledevelopment.un.org/content/documents/6569122-Pelenc-Weak%20Sustainability%20versus%20Strong%20Sustainability.pdf> [https://perma.cc/7W8R-D2UQ].

142. *Billion-Dollar Weather and Climate Disasters*, NAT'L CTRS. FOR ENVTL INFO., <https://www.ncdc.noaa.gov/billions/events> [https://perma.cc/N7NC-Q2RY].

corresponding smaller family size), including reduced environmental impact and a decreased strain on resources.<sup>143</sup> Most of the benefits will unfold in the long run, and an agent-based microsimulation forecast technique needs to be employed to accurately compute the long-run benefits, as a function of the input parameters (eligibility conditions).<sup>144</sup>

The empirical study will conclude with design and computation of a self-financing ecosystem created by the Fair Start GMI model. Over time, increased investment in children, along with small family units, will generate diverse positive externalities ranging from higher per capita workforce productivity, decreased environmental impact, and reductions in crime.<sup>145</sup> These long-term benefits will be weighed against the ongoing program costs to quantify the long-term impact of a GMI Fair Start program.

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143. Project Drawdown estimates that increased adoption of reproductive healthcare and family planning can reduce emissions by “102.96 gigatons of carbon dioxide, at an average annual cost of \$10.77 per user in low-income countries” by 2050. Women and Girls: Family Planning, PROJECT DRAWDOWN, <https://www.drawdown.org/solutions/women-and-girls/family-planning> [https://perma.cc/973Q-RTNV].

144. See, e.g., Francesco Figari, Manos Matsaganis, & Holly Sutherland, *Are European Social Safety Nets Tight Enough? Coverage and Adequacy of Minimum Income Schemes in 14 EU countries*, 22 INT’L. J. OF SOC. WELFARE 3 (2011).

145. Ismalia Ramon et al., *Early Childhood Education to Promote Health Equity: A Community Guide Economic Review* 24 J. PUB. HEALTH MGMT. & PRAC. e8 (2018).