

**Forum:** Economic and Social Council (ECOSOC)

**Issue:** The question of declining birth rates and aging populations in MEDCs

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## Introduction

Throughout history, humans have always produced more children than needed to maintain the world population. Projected to reach nearly 9.6 billion by 2050, the global population boom is considered a threat to global sustainability and security. Yet more economically developed countries (MEDCs)—characterized by low mortality rates, easily accessible birth control, and the perception of children being an economic drain due to housing, education, as well as other costs—are witnessing decreasing birth rates. Between 1966 and 1993, the global birth rate dropped from 5 children per woman to just 3. There are still countries with rapid population growths, but an estimated 48% of the world lives in countries wherein the replacement threshold of 2.1 children per woman is not being met.

Furthermore, as advancements in healthcare, medicine, and living standards have been made, MEDCs are experiencing a heightened proportion of the elderly in their population in conjunction with lowered birth rates. The UN projects the global median age to be 41.9 in 2100, yet the G7 nations are projected to have a median age of 48.5—6.6 years more than the global median. Such demographic shifts result in high but stagnant population growth, to the extent where the number of elderly dependents is rising while there are fewer economically active people to support the elderly. To illustrate, the old-age dependency ratio of the US was 20 seniors per 100 working-aged, but the World Bank projected this number to rise to 35 per 100 in 2038.

MEDCs worldwide are met with the repercussions of declining birth rates and an aging population. Many are tasked with dealing with the economic, social, and political repercussions of this demographic transition while attempting to raise birth rates through various incentives. In addition to exploring the issues presented by the demographic transition, this report will also provide possible solutions.

## Definition of Key Terms

### Birth Rate

The number of children being born in a specified area within a given time frame is divided by the population of the area. The rate is usually expressed in "per 1,000 of population".

## **Total Fertility Rate**

The average number of children a woman would birth over her lifetime if she were to experience the exact age-specific fertility rates through her lifetime (and if she were to survive to the end of her reproductive life).

## **Replacement Birth Rate**

The total fertility rate in which women would have only enough children to replace themselves and their partners. Replacement is only achieved when a child reaches 15 years of age. In MEDCs, the replacement fertility rate is roughly 2.1 live births per woman.

## **Old Age Dependency Ratio (OADR)**

The number of individuals aged 65 and above per 100 working-aged individuals, aged 15~64.

## **Death Rate**

The number of deaths in a specified area within a given time frame, divided by the population of the area. The rate is usually expressed in "per 1,000 of population".

## **Working Age Population**

The total number of people that are able to work or are most likely working, based on a number between a predetermined age group, usually from the age of 15-64.

## **Healthy Aging**

As defined by WHO, healthy aging is the development and maintenance of functional ability—such as the physical and mental capacities of an individual as well as the surrounding environment—that enables well-being in older age.

# **Background**

## **Effects of COVID-19**

The COVID-19 pandemic has caused the decline in birth rates to worsen. Particularly in MEDCs, most children birthed are wanted or planned—deciding to have a baby depends on optimism towards the future. In a pandemic, optimism is difficult to muster; this may contribute to the estimation of 300,000 babies that were not born in the US due to economic insecurity related to the pandemic. As some analysts expect a mini baby boom after vaccines are made widely available and restrictions lifted, the possibility of this being a short-term phenomenon exists. Yet even a mini baby boom would be unlikely to compensate for the decline fully.

Another way COVID-19 contributes to suppressed population growth in MEDCs is the closed borders in an attempt to limit its spread. In 2020, Australia saw its first population decline since World War I due to heightened COVID-related border controls. In the same year, Canada granted permanent-resident status to 180,000 applicants, most of whom were already on student or work visas, while the target was 381,000. Many MEDCs rely on immigrants to fill holes in the labor market; thus, immigration being lethargic is detrimental.

## Migration

Though international migration significantly impacts global demographic, its effects on fertility and the number of births are often overlooked. Yet their relationship should be evident—migration usually increases the population of young (and potentially reproducing) adults in host countries and reduces that in source countries. Source countries tend to have high birth rates, while host countries tend to have low birth rates. Studies have also shown that migrants' fertility behavior is affected by the change of social norms.

Generally, the impact of migrants' exposure to new circumstances, values, behavioral norms, and practices (including those affecting fertility decisions) takes time to become apparent. Nonetheless, migrants typically assimilate into their host country, adopting the host country's childbearing practices and desired number of children; a convergence of migrants' demographic patterns with those of the host population eventually occurs. Thus, it can be seen that immigration is a temporary solution to declining birth rates. For example, according to the Center for Immigration Studies, the fertility of US immigrants has declined significantly since its peak in 2008. Between 2008 and 2013, the birth rate among migrant women dropped from 76 to 62 births per 1,000 as the total fertility rate dropped from 2.75 children to 2.22 children. If such trends continue, the fertility of migrants is expected to drop below the 2.1 replacement rate, matching that of non-migrants. However, it is important to note that this may not only be a result of assimilation to the US, as birth rates among recent immigrants (whose source country's childbearing practices may have changed) are also a factor.

## Economic Impacts

Birth rates lower than the replacement birth rate lead to a decreasing population and a "demographic drought," affecting multiple components of the economy. A delayed impact of declining birth rates is that the worker-age population will eventually decrease as well. This decrease causes labor shortages, which is already evident in major economies such as Japan and Germany. Companies will have to be more competitive in terms of the pay and benefits they offer in order to recruit the scarce number of workers available. As youthful workers tend to be more innovative, this may also slow growth in many industries. Lower birth rates and falling working-age populations also equate to fewer consumers in the long run. Reducing the opportunities to generate growth on the domestic market leaves those countries with low birth rates more susceptible to external factors. Such countries may be more vulnerable to market fluctuations overseas (as they are overly dependent on exports) or have their businesses lose their competitive advantages due to decreased innovation.

### *Strain on government spending*

As the elderly have a higher demand for health care services and social care, governments will need to spend more on pensions and health care with aging populations. However, in tandem, there will be fewer people to pay income tax; shrinking taxes increase pressure for cuts in essential services such as infrastructure. While a portion of such costs for an aging population would, to some extent, be balanced by less spending on education for the youth, the extra spending on health and social care would far outweigh the lowered spending on education. Thus, higher taxes may be required to compensate for the shrinking workforce. Should there be strong economic growth and mild population decline, the aging population will be manageable. Nonetheless, concerns that post-war economic growth rates have slipped away and the world is entering a period of secular stagnation remain, so the world cannot rely on high growth.

### **Birth Control**

There has been a significant decrease in birth rates in MEDC's as people are more aware and comfortable with using contraceptives. While some forms of birth control are external, such as a condom, others are internal, such as contraceptive injection. External forms of birth control, though riskier, are preferred by many due to economic advantages and useability. Internal forms of birth control are safer but more expensive and require medical assistance. Using contraceptives and being aware of them has helped reduce child pregnancies. Moreover, the birth control industry is an economically flourishing industry as many opt to use such methods. Though there are many advantages to using birth control, such as preventing the spread of sexually transmitted diseases, it is the cause for a significant decrease in birth rates.

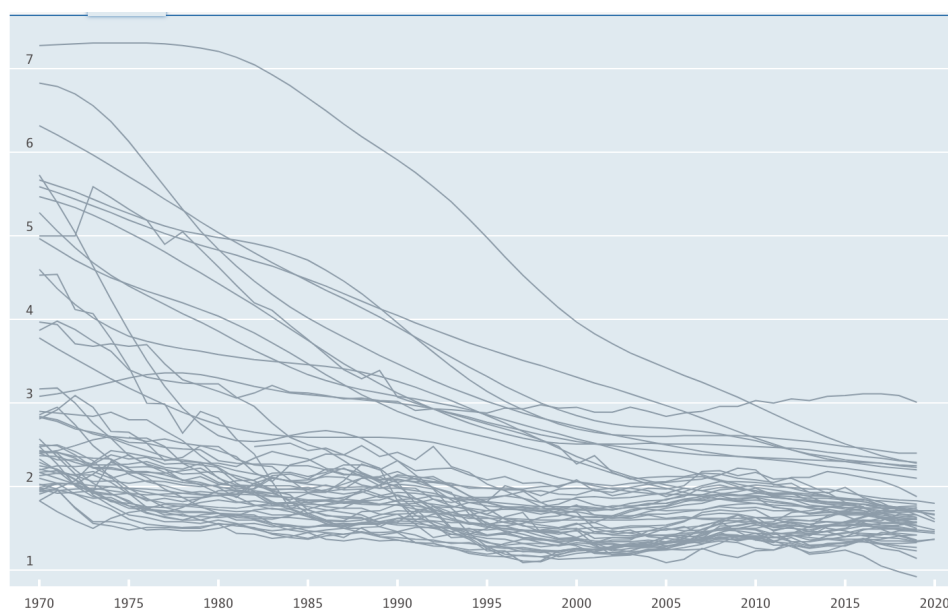
### **Improvement in Medical Care**

As a result of better medical care, the average life expectancy has increased in MEDC's and some LEDC's. For example, in Latin America, the average life expectancy sixty years ago was 55.7 years; however, now it's nearly 75 years. In a span of 60 years, the life expectancy increased by almost 20 years. While other factors contribute to this cause, such as increased quality of life and higher equality, improvement in medical care played a crucial role. Moreover, with technology progressing, there are more safer, more efficient, and less risky treatments to solve the health problems faced by many aged people in this day and time. For instance, surgeries were performed more hygienically and with modern and appropriate tools. In addition, post-surgery treatment also improved with more equipped rooms to ensure the stability and health of patients, specifically aged ones.

### *Infant Mortality and Unpredicted Births.*

Before the 21st century, unpredicted pregnancies were more common with the low availability of contraceptives. Moreover, couples opted to have more than one child for reasons such as the high plausibility of infant mortality. Yet, in the 21st century, the higher chance of preventing infant mortality and easy availability of contraceptives has reduced the rate of births. For instance, in Saudi Arabia in 1970, the number of children/women was 7.28, while in 2019, it reduced to 2.28. While the cause for this

decrease could be various reasons, the most plausible is improvement in health care, thus ensuring a higher rate of child survival, popularity of contraceptives, and couples just opting to have a smaller family.



A chart taken from the Organization for Economic Co-operation and Development (OECD) depicting the fertility rate in the 193 UN Member states.

## Major Parties Involved

### World Health Organization (WHO)

To promote healthy aging in every country, the WHO works with its member states, UN agencies, and stakeholders from various sectors. WHO works according to the *Global strategy and action plan on aging and health 2016–2020* and the related UN Decade of Healthy Aging (2021–2030).

### Japan

Japan's OADR already stood at 48 in 2020, yet the country remains an economic powerhouse and generally cites the need to provide for their elderly as a concern for the future. With worries of labor shortages, the Japanese government has attempted to increase immigration and women's labor force participation and change its work culture. More notable, however, is Japan's leading role in increasing automation to replace laborers in industries such as construction and eldercare. In 2016, Japan exported \$1.6 billion worth of industrial robots, more than the next five biggest exporters combined. While Japan has a debt-to-GDP ratio of 238%, this has been a matter of deliberate fiscal policy rather than an overwhelming burden of caring for the elderly.

## Germany

Germany's OADR was at 33 in 2020, yet it still remains an economic powerhouse while attempting to support the needs of the elderly, which might become a concern in the long run. However, the ratio of elderly in the country and working-age population hasn't affected the country's debt to GDP ratio, which is 57%. In 2015, Germany welcomed mass migration to fill the predicted gaps in the labor force. However, the proportion of highly-educated migrants decreased, and Germany had trouble providing jobs for the new residents. Moreover, Germany, a G7 country, has seen a huge decrease in birth rates and increase in mortality since the mid 20th century.

## China

China, the most populous country in the world, has been facing a steady decline in its birth rate. Initially, China had a one-child policy (one child per married couple) as part of their Family Law due to overpopulation; however, with birth rates decreasing, it became a two-child policy (two children per married couple). As of May 2021, the Chinese government remodified this law to a three-child policy (three children per married couple) and abolished fines and forms of punishment for exceeding the stated quota. Moreover, the government promised to reduce the cost of childbirth, education, and parenting and ways to make the tax for childcare services deductible, as these extra costs are why married couples opted not to have children, according to parents and demographers.

## The United States

Between 2010 and 2020, the US population increased only by 7.4%—the lowest increase since the 1930s. Projections say that if this rate continues the way it is now, the population of the US in 2060 will only be approximately 409.5 million, which is only 78.1 million more than the current population. Moreover, some states are already facing the negative effects of population decay. One such example is the reduction of tax, which has made it harder for the government to support services and infrastructures in rural areas. While the Biden administration advocated for family-friendly policies, making it easier for Americans to have children, that won't suffice to control the widening gap between working-age adults and the rest of the population. Therefore, immigration has been a recommended way of increasing the US population, specifically the natality rate in the long run.

## Timeline of Events

Date	Description of event
<b>April, 2002</b>	The adoption of the Madrid Plan of Action on Aging and Political Declaration at the Second edition of the World Assembly on Aging. The plan brought the growing issue of aging populations to the global stage and urged world leaders to focus on the issue.
<b>2015</b>	Germany welcomes the mass migration of people all around the world in the hopes that the predicted gaps in their labor force will be filled.

<b>December 14, 2020</b>	WHO adopts the UN decade of healthy aging (2021-2030) as an extension to the Global Strategy and Action Plan on Aging and Health (2016–2020.)
<b>May, 2021</b>	The Chinese government sets the three-child policy in place after a long history with the one-child policy.
<b>2038</b>	The year the World Bank has projected for the old-age dependency ratio of the US to increase from 20 seniors per 100 working-aged to 35 seniors per 100 working age.
<b>2064</b>	The year the global population is projected to peak at 9.7 billion people.
<b>2100</b>	The global birth rate will have fallen below 1.7 by 2100, as projected by the University of Washington's Institute for Health Metrics and Evaluation. This is 0.4 children below the replacement rate.

## Previous Attempts to Resolve the Issue

### Mass Migration

Over the past ten years, 47% of the increase in the United States' workforce and 70% of Europe's were made of migrants. The level of education for these migrants vary, but immigrants represented 22% of entries into growing occupations in the United States and 15% in Europe, such as healthcare and STEM. Immigrants also represented 24% of entries into declining occupations in Europe and 28% of those in the United States. Such occupations, including craft, machine operators, production, maintenance, and repair, are deemed unattractive by native workers; thus, immigrants are filling labor needs by filling these occupations. Yet immigrants are often perceived as a burden to the public purse, and xenophobia against immigrants exists. For example, in 2015, Germany, hoping that they would fill in forecast holes in the labor force, welcomed a mass migration of asylum claimants. There were promising reports of highly-educated Syrians; however, they gradually faded as Germany's new residents struggled to assimilate. After five years in the country, migrants still had only a 1 in 2 chance of employment.

### UN Decade of Healthy Aging (2021-2030)

The second action plan of the WHO's *Global strategy on aging and health*, the Decade builds on the United Nations Madrid International Plan of Action on Aging and aligns with the timing of the United Nations Agenda 2030 on Sustainable Development and Sustainable Development Goals. The Decade is a global collaboration that seeks to unite governments, international agencies, professionals, the media, and the private sector to improve the lives of the elderly, their families, and the communities in which they live. The Decade aims to address four areas for action: age-friendly environments, combating ageism, integrated care, as well as long-term care.

### The International Madrid Plan of Action (2002)

The Madrid Plan of Action was a turning point in how the world could address the key challenge of



"building a society for all ages" The goal of this plan was to offer plausible and actionable solutions on how to handle aging in the 21st century. The plan was divided into three subsections. The first being "older persons and development," the second being "advancing health and well-being into old age," and the third being "supportive environments." All these subsections were plausible ways, or categories governments and NGOs could use to approach the issue of aging in their countries.

## Increased Benefits

Two-thirds of countries in Europe have introduced policies to increase fertility rates. From baby bonuses and tax incentives to paid parental leave, such policies had had varying degrees of success.

Cash policies may lead to small, temporary increases in birth rates, with some people choosing to have children earlier, but most have not resulted in higher fertility rates in the long term—a pattern observed in the many countries which have used cash policies. For example, the Italian government tried an €800 compensation per couple per birth. Launched in 2015, it does not appear to have led to significant changes; with 1.3 children per woman, Italy still has one of the lowest fertility rates in the EU. The failure of cash incentives may be attributed to the fact that one-off payments fail to address underlying issues such as social attitudes - an important factor in a country with less than 50% of women in work - or large levels of emigration.

A fairly successful country in terms of maintaining birth rates is Sweden, with 1.9 births per woman. Sweden grants parents a monthly allowance of up to 1,573 krona (£128; \$167), which increases when the child ages to 11 and 15. Swedish parents are given 480 days of paid parental leave to share, with men claiming about 30% of all leave. Childcare is also supported with lower working hours in Sweden compared to other countries. Despite these benefits, even Sweden has begun to see a fall in its fertility rates, showing that the real key to higher birth rates remains unclear.

Additionally, France created a scheme to ensure that the birth rate didn't drop as professional women opted not to have children anymore. The Scheme included a cash incentive of 675 euros per month for a year after the third child's birth, a reduction in train fares for larger families, and a tax reduction. This means that the more children a family has, the less tax they need to pay. In addition, the government also grants three years of paid leave for mothers or fathers as well as a government-funded daycare for children under the age of three.

## Possible Solutions

### Short Term

- Giving incentives to older citizens to continue working in the workforce while encouraging companies to nurture a work environment that welcomes older citizens. Jobs that require extensive experience, minimal movement, or other features characterized by the elderly may be offered. Policies regulating whether a company can reject an older applicant or unemploy older employees should be made to combat ageism.



- A prerequisite for the elderly to participate in the labor market is a healthy body. Thus, there should be measures to ensure longevity with quality. Medical services and recreational activities should be made widely available, to the extent that the elderly can look after themselves and even work. This would ease the pressure on the working population as well.
- Accepting immigrants has proven effective in delaying population decline for many countries. This is a solution delegates should include when drafting resolutions; however, one must also take into account issues such as illegal immigrants, the skill level of immigrants, as well as the assimilation of immigrants into their destination country.
- Member states should create awareness campaigns using various media to advertise the policies and benefits its government has/will provide regarding childbirth and raising children. Many couples refrain from having children due to economic concerns, and they may not be aware of the aid available to them.

### Long Term

- Automation and robotics are promising in either enhancing or replacing human labor. While known to be limited to routine manufacturing activities, constant advancements in technology and artificial intelligence open the possibility of using automation in sectors beyond manufacturing. Finding a way to automate or systemize the rewards of having children may also benefit certain countries wherein distributing such rewards is rather complicated.
- A solution that does not require raising birth rates addresses a pre-existing issue: gender inequality in the labor force. Women's participation in the labor force is key to counterbalancing falling birth rates. Pre-COVID-19, approximately 80% of the world's working-age men participated in the paid labor force compared to 52.6% of the world's working-age women. By lowering the gender pay gap and gender promotion gap and eliminating the stigma against working mothers or taking maternity leaves, countries can tap into pre-existing human potential.
- While many governments which have tried to increase birth rates by providing subsidies for parents did not see long-term effects, perhaps more subsidies can be given. Monetary subsidies would be particularly useless, seeing as a major reason for abstaining from having children is the expenses.

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<sup>1</sup> Most useful links in bold

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