Internship Training

at

International Institute of Health Management and Research

# "Pro fertility Polices in countries with Below Replacement level Fertility Rates: A Scoping Review"

By

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**PG/24/090**

Under the guidance of

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PGDM (Hospital & Health Management)

2024-2026




International Institute of Health Management Research

New Delhi

This certificate is awarded to

**Dr. Rohan Sachdeva**

In recognition of having successfully completed his

internship in the department of

**Research**

and has successfully completed his Project on

**"Pro fertility Polices in countries with Below Replacement level Fertility Rates: A Scoping Review"**

6th July 2026

**International Institute of Heath Management and Research**

He comes across as a committed, sincere and diligent person who has a strong drive and zeal for learning. We wish him all the best for future endeavors.

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This is to certify that **Dr. Rohan Sachdeva** student of PGDM (Hospital & Health Management) from International Institute of Health Management and Research, New Delhi, has undergone internship training at **IIHMR Delhi** from **15th March 2026 to 15th June 2026.** The candidate has successfully carried out the project designated to him during internship training and his approach to the study has been sincere, scientific and analytical. The internship is in fulfilment of the course requirements.

I wish him all success in his future endeavors.

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**Name of the Organization in Which Dissertation Has Been Completed**: IIHMR,Delhi.

**Area of Dissertation:** "Pro fertility Polices in countries with Below Replacement level Fertility Rates: A Scoping Review".

**Attendance:** 84%

**Objectives achieved:**

**Deliverables:** Paper from this should be published in a SCI journal.

**Strengths:**

**Suggestions for Improvement:**

**Suggestions for Institute (course curriculum, industry interaction, placement, alumni):**

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| **Title of the Dissertation/Summer Assignment** | "Pro fertility Polices in countries with Below Replacement level Fertility Rates: A Scoping Review". | | |
| **Plagiarism detect software used** | **"TURNITIN"** | | |
| **Similar contents acceptable (%)** | Up to **15** Percent as per policy | | |
| **Total words and % of similar contents Identified** | **6%** | | |
| **Date of validation (DD/MM/YYYY)** | 11/01/2026 | | |

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VIII

**About IIHMR Delhi**

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- Research that has high relevance to health policies and programs at national and global level.
- Continued education through management development programs and executive programs for working professionals to help them upgrade their knowledge and skills in response to the emerging needs of the industry.
- Technical consultation to the national and state-level flagship programs to address the gaps in planning as well as implementation.

Over the years IIHMR Delhi has emerged as an institute of repute both nationally and globally for producing socially conscious, skilled and vibrant top-class health care management professionals. Our graduates are well-matched for the ever-changing health care sector and evolving social milieu. The institute has progressed as a leader in research, teaching, training, community extension programmes and policy advocacy in the field of health care. IIHMR has carved out a niche for itself through its cutting-edge academic curriculum, infrastructure, accomplished multi-disciplinary faculty and research. The Institute as an autonomous body of international stature has been developing leaders for several years to shape tomorrow's healthcare by equipping the students in the fields of health, hospital, and health information technology.

The Institute's dynamic health care research programmes provide rigorous training in management, health systems, hospital administration, health care financing, economics, and information technology.

**Acknowledgement**

It is an esteemed pleasure to present this research project by thanking each and every one who helped me in this task. I would like to express my sincere gratitude towards my guide **Dr. Mukesh Ravi Raushan,** Assistant Professor, IIHMR Delhi, who helped me immensely throughout the tenure of my internship. He inspired me greatly to work in this project with his valuable guidance, support, interest, encouragement, involvement and advice. I would like to thank **Dr. Anuj Kumar Pandey and Dr. Diksha Gautam**, Assistant Professor, IIHMR Delhi, for allowing me to experience such great opportunities. I would also like to express my special thanks to **Dr. Sutapa Neogi, (Director)** IIHMR, Delhi for their support and guidance in providing such great opportunity which helps in to grow and learn about many interesting aspects.

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# Abbreviations

ART - Assisted Reproductive Technology

CSOK- Családi Otthonteremtési Kedvezmény

IVF - In Vitro Fertilization

MeSH - Medical Subject Headings

OECD - Organization for Economic Co-operation and Development

PCC - Population, Concept, and Context

SIDS - Small Island Developing States

TFR - Total Fertility Rate

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# Unit1.

# Scoping Review: Pro fertility policies in countries with Below replacement fertility Rates.

## Introduction

The last few decades have seen rapid decline of fertility across most of the world. Many countries found there TFR either at level or below replacement level of 2.1 child per woman. Replacement level fertility refers to average number of children a woman should have in her life to ensure that population replaces itself in absence of migration(1). Initially fertility decline was seen as a positive outcome and was associated with rapid urbanization, better education, socioeconomic development and improvement of women's rights and was expected to stabilize after a period of fall once countries complete their demographic transition, but the consistent low fertility has transformed from a positive development outcome to a demographic concern for many developed and developing countries across the world(1).

This decline is particularly severe in high income countries. While this trend is more concentrated in high income countries, similar trends are now emerging in many middle income countries as well(1). This fertility transition begun in Europe and northern America, later spreading to Asia and other regions such that only the continent of Africa is expected to drive the world's population growth in next 50 years with Africans expected to make up around 25% of the population by 2050.

While talking about the issue of low fertility our first instinct is to point towards the lack of desire to have children among the younger generation but that is not necessarily true. Research shows that many people across the world in different societies still express the preference to have kids or have more kids. However, their actual fertility often falls short of these preferences(1). This difference suggests barriers that prevent people from meeting their reproductive goals. Such barriers include economic uncertainty, housing constraints, delayed marriages, infertility or broader systematic factors.

This persistent decline in fertility has severe demographic implications. A sustained TFR of below replacement level contributes to an aging population, shrinking work force and a large

dependent population(2). Especially the countries across western hemisphere and East Asia, recording a total fertility rate of below 1.5 children per woman that is described as “very low fertility”.

## Population Ageing and Decline

Persistent low fertility alters a country’s population age composition profoundly. When fertility remains consistently low, fewer children are entering the population/work force and while the number of older people are still rising due to increase in life expectancy, that leads to an aging population that is characterized by growing number of elders and decline in population of working individuals(2).

Population ageing has severe social and economic consequences. One of the most significant is increasing in dependency ratio, with a smaller population in the working age group, this means that a smaller younger population must support a larger and still growing retired population.

This puts great pressure on the main pillars of a working society: Pension system, Health care services and long-term economic wellbeing of a country. Government will have to spend more on pensions and healthcare due to ageing population while receiving less tac revenue and business generation due to a shrinking workforce(3).

As fewer people enter the workforce every year countries may find it difficult to remain productive and maintain competitiveness with other countries. Especially the sectors that rely heavily on young workers. This will lead to overall decrease in economic growth of the country and discourage investors, which will again negatively affect the economy(3).

Aside from economic consequences, population decline also affects the national security of a country. Countries might also see this as decline in nations strength and military. Due to this very reason the population decline is becoming more integrated with national policies and narrative.

Many developed countries have tried to reverse this through immigration. However, it is becoming more difficult in many countries with rise of nationalism and fear of lack of effort of the immigrants to integrate with their country.

So, more attention has been shifted towards strategies to support fertility and family formation of domestic population.

## Pronatalism and population policy

The government's response to this decline is pronatalist policies. Pronatalism refers to an ideology, policy direction and measures that are designed to encourage its people to have higher fertility, and larger families with an aim to increase the size of its population or slow the population ageing. These policies seek to reduce the barriers associated with childbearing and rearing.

Going back a century, countries have adopted several population policies with pronatalist approaches to replenish the losses caused by war and Antinatalist approaches in peacetime to limit the population growth and prevent pressure on already limited resources. Antinatalist policy seeks to reduce fertility through free contraception, family planning initiatives and reproductive health measures. In contrast, the aim of pronatalist policy is to increase fertility through financial incentives, generous leave programs, childcare facilities and housing support.

One of the measures governments in the developed world took to mitigate this was immigration but with nationalism on the rise again recent decades have witnessed a renewed interest in these prenatal policies.

Modern pro fertility policies have a wide range of interventions. These include direct cash benefits, child grant, tax benefits or credits, housing subsidies, more generous and flexible leave programs, childcare services and publicly funded ART treatment.

The resurgence of pronatalism reflects growing concern about the issue. While immigration is one of potential responses many governments favor policies supporting fertility within their own population.

The main justification for prenatal policies arises from the differences between fertility intentions and the actual fertility outcome i.e. many individuals desire more children than they have. So, government justifies pronatalist policy as measures to help individuals who want to have children their ideal family size rather than direct pressure to have more children as was seen in soviet counties after WW2.

Simultaneously governments view pronatalist policy not only as a social welfare but an instrument to reverse the demographic tide and maintain significance in terms of economy and national strength on global stage.

## Rationale of study

Although several countries now have implemented pronatalist policies or support measures, the nature and the design of these policies vary. Existing evidence is fragmented across individual countries or policy evaluations. While some studies focus on one country or intervention and others focus on broader policy systems.

A systemic mapping of these policy is therefore important to understand how different governments are responding to low fertility and policies or interventions are most common.

This study seeks to bridge this gap by systematically mapping the policies across different countries in their context. This study aims to identify common approaches, classify the interventions and improve understanding regarding these policy types.

## Review of Literature

The decline in fertility across countries can be explained by the concept of demographic transition, which describes how society shifts from high fertility and high mortality to low fertility and low mortality as they develop. In the early stages the improvement in healthcare, nutrition and sanitation reduces the mortality, that is followed by a gradual decline in fertility as more children survive and less hands are needed in a non-agrarian society. However, it has often been seen that in later stages of transition fertility usually falls below replacement level, leading to population decline(4).

The concept is closely associated with modernization, as societies develop the cost of raising children increases, whereas their economic utility decreases. This along with changing gender norms and delayed family formation leads to persistent low fertility even when development stabilizes.

Before examining the policies, it is important to understand the factors that contribute to the decline. Fertility behavior of an individual is influenced by a range of economic, social, cultural and systematic factors. Rarely is the decision of marriage or childbirth decided by a single factor, rather they are determined by interaction of these factors along with personal choices(4).

Studies have identified several factors responsible for difference between actual fertility desire and the outcome like economic insecurity, rising cost, housing issues and difficulty maintaining a work life balance. These factor together creates environment in which individuals have no other choice but to postpone or let go of their desire to have children.

Understanding these factors is necessary as pronatal policy are designed to address them.

## Determinants of low fertility

### 1) Delayed Parenthood

The changing landscape of the global market with a greater number of individuals opting for higher education, parenthood or family formation has shifted to later stages of life. Individuals are now spending longer periods of their life on education and face a more uncertain job market

making it difficult for them to achieve economic stability. Therefore, a lot of these individuals postpone marriage and childbearing until they feel secure in terms of housing and employment.

This postponement has contributed to decline in fertility significantly and has pushed women's age of having first child to late 20s while in countries like Spain, Japan, and south Korea the average at first birth exceeds 30 years. This delay also increases risk of infertility.

### 2) Economic Uncertainty

Economic insecurity is one of the main determinants of low fertility. A stable employment along with reasonable income is considered one of the prerequisites to family formation. With rising unemployment along with job uncertainty with advent of AI, wage growth not in proportion to inflation and uncertain contract jobs have discouraged the formation of family and hence contributed to the declining fertility.

These changes have delayed individual independence, partnership/marriage formation and childbearing.

### 3) Work life conflict

The work life conflict primarily of women is identified as a main culprit of reducing fertility, especially with growing participation of woman in workforce. In corporate work cultures, where individuals are expected to work long hours, with limited flexibility and insufficient support for childcare fertility tends to remain low.

This problem is particularly pronounced in east Asian countries like Japan, South Korea and China where demanding work cultures are in place along with sole expectations of childcare from mothers. Such environments have increased the importance of policies that can facilitate a balance between work and parenthood.

### 4) Gender inequality in household work

In last few decades, women's labor force participation has increased by a large margin, but women are still expected to do the large share of unpaid household chores along with childcare.

This unequal distribution of childcare, domestic work along with participation in the workforce increases the costs of being parent for mothers causing them to limit family size. Consequently,

it has been argued by researchers that greater paternal involvement might be one of the prerequisites for recovering this fertility decline.

### 5) Rising cost of childrearing

Modern parenting norms put great emphasis on intensive investment in child development and parents are expected to contribute a great deal of time, energy and money to childrearing.

These expectations increase the perceived cost associated with childrearing and discourage prospective parents from having larger families. Hence growing expectations associated with parenting may contribute to declining fertility.

### 6) Housing constraints

Housing affordability: rising prices and difficulty accessing mortgages or loans may delay acquiring residential independence and marriage. Research suggests that individuals living in expensive housing markets are more prone to delay first birth as compared to areas where average housing cost is low.

## Policy Responses to low fertility

In response to this crisis, government has adopted a great range of policies to support families and encourage children. These policy often covers multiple objectives like poverty reduction, direct compensation cost of having children, reducing child penalty for mothers, promoting gender equality and fertility promotion.

Based on the OECD family policy classification profertility policy can be classified into six broad types(5,6).

### 1) Poverty reduction

The policy in this category mainly focuses on low-income families and ensures a basic standard of living for households with children. Their primary objective is to reduce poverty and provide something akin to income stability.

These policies are not universal and are usually targeted for low-income families, by providing financial stability, these measures aim is to reduce economic uncertainty that discourages child rearing.

## 2) Direct compensation for the cost of having children

The financial incentive policies are the most commonly used pronatalist measure. The aim of these policies is to reduce the economic cost associated with raising children and compensate families with children.

While poverty reduction policies are focused on low-income households, these policies are likely universal.

Common methods: Child allowance, baby bonuses or grants, family cash transfers, child tax credits maternity capital schemes, housing subsidies link to family size.

## 3) Fostering employment

This category involves policies that provide support to parents to balance parental responsibilities with their employment especially measures meant to protect female labor force participation and reduce work family conflict.

Common Instrument/tools: Paid parental leave, paternity leave schemes, flexible working hours, workplace childcare facility.

## 4) Promoting gender equality

These policies aim to redistribute the work associated with caregiving more equally between both parents, there reducing the excessive expectations from mothers to balance childcare with their formal employment alone.

Common tools:

Nontransferable father only leaves, shared parental leaves, policy encouraging paternal involvement and dual earner tax incentives.

## 5) Early childhood development and childcare support

These policies focus on providing more accessible and affordable childcare and early education services to reduce the time and cost associated with early childhood developments and improve child's development outcome. These policies are effective in supporting working parents.

Common tools:

Governments funded nursery, daycare, subsidized childcare services, Nutrition and development schemes.

## 6) Raising birth rates

The policy in this category directly aims to increase fertility or reduce the barriers associated with infertility treatments. This considers the medical consequences of delayed parenthood**.**

Common tools:

Incentives for marriage, National Fertility Strategies, Subsidized or government funded ART treatment, expansion of infertility treatment. Hungary provides a good example of such policies where country has nationalized the infertility clinics and provides five cycles of treatment along with medicine free of cost.

## 7) Reproductives rights and ethical debates concerning Pro natalist policy

Not every pronatal policy is concerned with providing support as some governments adopt a more restrictive approach in which by making it difficult for their citizens to access family planning methods like contraception and abortions, they try to promote fertility. Iran's recent policy shows this trend, the 2021 "Youthful population and protection of family" law introduced financial incentives for early marriage and childbearing while simultaneously putting restriction on contraception, sterilization, fetal screening and abortions. Such measures might widen health inequalities and undermine reproductive rights(7). These highlights the ethical concern that can emerge when proferiltity becomes central to a country's national policy.

# Unit2.

## Methodology

### Study design and analytical framework

This study was conducted using Arksey and O'Malley framework. Scoping Review approach was used for mapping existing evidence on pronatalist and pro fertility policies without restricting which type of study chosen.

The research question and eligibility criteria were developed using PCC framework (Population concept and context) [Table 1]. The population of interest included individuals of reproductive age group. The concept focused on pronatalist and pro fertility policies, while the context was limited to countries with TFR below replacement level.

Table 1. **Research question as per PCC framework**

| Research question | Population | Concept | Context | Keywords |
|---|---|---|---|---|
| *What type of Pronatalist policies are being implemented in countries with below Replacement level fertility rates?* | Countries with Below replacement level fertility, with more than 1 million population and are not part of SIDS (Small Island Developing States) | Pro fertility/Pronatalist policy or measure including financial assistance, childcare, housing incentives, Tax benefits. | National/local policies implemented to raise fertility. | **Fertility**: "fertility", "total fertility rate", "birth rate". **Policy**: "policy", "program", "intervention", "scheme". **Pronatalist measures**: "pronatalist", "family policy", "child benefits", "parental leave", "childcare". |
| *How can these policies be classified under thenevon's OECD Policy Framework?* | | Classification based on Thenevon's OECD framework: 1) Poverty reduction 2) Direct compensation 3) Fostering employment 4) Improving gender equity 5) Support for early childcare 6) Raising birth rates | National/local policies implemented to raise fertility mapped and classified based on chosen framework. | |

## Data sources and Search strategy

Countries meet the criterion of below replacement fertility. i.e., TFR<2.1 were identified using the most recent data available from World Bank. Only sovereign countries with a population of at least one million will be considered for inclusion.

A comprehensive literature search was done across multiple databases, including PubMed, Scopus, and ProQuest. The search was limited to articles published in last 10 years to ensure relevance to modern demographic and policy context.

The search strategy included a combination of Keywords related to Fertility: “fertility”, “total fertility rate”, “birth rate”. Policy: “policy”, “program”, “intervention”, “scheme”. Pronatalist measures: “pronatalist”, “family policy”, “child benefits”, “parental leave”, “childcare”.

Boolean operators were used appropriately to combine MESH terms and search strategy was adapted for each database.

The detailed search strategies, dates of search, search limits, and the number of records retrieved from each database are presented in *Table2,3 and 4.*

| *Table2* **PubMed search strategy and results (Search date: 15 May 2026; Search period: 2016–2026)** | | |
|---|---|---|
| Search No. | Search Strategy | Results |
| S1 | fertility OR "total fertility rate" OR "birth rate" OR childbearing | 92,175 |
| S2 | policy OR program* OR intervention* OR scheme* OR reform* | 2,912,256 |
| S3 | pronatalist OR "pro fertility" OR "family policy" OR "fertility policy" OR incentive* OR "child benefit* OR "parental leave" OR childcare | 32,443 |
| S4 | S1 AND S2 AND S3 | 410 |

| *Table3.* **ProQuest search strategy and results (Search date: 14 May 2026; Search period: 2016–2026)** | | |
|---|---|---|
| Search No. | Search Strategy | Results |
| S1 | NOFT(fertility OR "total fertility rate" OR "birth rate" OR childbearing) | 51,366 |
| S2 | NOFT(policy OR program* OR intervention* OR scheme* OR reform*) | 2,037,914 |
| S3 | NOFT(pronatalist OR "pro fertility" OR "family policy" OR "fertility policy" OR incentive* OR "child benefit*" OR "parental leave" OR childcare) | 50,670 |
| S4 | S1 AND S2 AND S3 | 523 |

| *Table4.* **Scopus search strategy and results (Search date: 13 May 2026; Search period: 2017–2026)** | | |
|---|---|---|
| Search No. | Search Strategy | Results |
| S1 | TITLE-ABS-KEY(policy OR program* OR intervention* OR scheme* OR reform*) | 5,369,368 |
| S2 | TITLE-ABS-KEY(fertility OR "total fertility rate" OR "birth rate" OR childbearing) | 200,843 |
| S3 | TITLE-ABS-KEY(pronatalist OR "pro fertility" OR "family policy" OR "fertility policy" OR incentive* OR "child benefit*" OR "parental leave" OR childcare) | 276,035 |
| S4 | S1 AND S2 AND S3 | 8,523 |

## Eligibility Criteria

### Inclusion criteria:

The scoping review will include
→ Countries with TFR< 2.1
→ Sovereign countries with a population of at least one million.
→ Studies explaining or examining or commenting on pronatalist/pro fertility policies published in last 10 years.

### Exclusion Criteria

The scoping review will not include:
→Non-Sovereign countries.
→Small Island Developing States.
→Countries with populations of less than 1 million.

## Study Selection

A two-stage screening process was followed. In the first stage, titles and abstracts were screened for relevance. In the second stage, full text documents were reviewed to determine inclusion. The selection was done in a standardized way to ensure consistency.

## Data Extraction

Data from the included studies was extracted using a standardized form. The extracted information will have country name, policy/intervention name, target population and context and classification in six categories based on OECD classification. [Table 5]

Table 5 Standardized table for Data Extraction

| Country | Policy/Program/Support measures Name | Context of measure | Target Population | Poverty reduction and income maintenance. | Direct compensation for the economic cost of children. | Fostering employment. | Improving gender equity. | Support for early childhood development. | Raising birth rates. | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |

## Data Analysis

Extracted data will be analyzed using both descriptive and thematic approach. Policies will be classified using the OECD based framework proposed by Olivier Thevenon(6), which categorizes family and fertility related policies into six key domains: poverty reduction, cost compensation for children, employment support, gender equity, early childhood development, and fertility promotion.

A descriptive summary will be used to present the distribution and characteristics of policies across countries, while thematic analysis will be used to identify patterns and similarities.

# Unit3.

## Result

Following a rigorous selecting and screening method we included information from 65 articles regarding the Pro-fertility policies about 21 countries with results organized into three sections. 1) Study Selection 2) Overview of policies identified across countries 3) Classification of these policies based on OECD policy Framework.

### Study Selection

The Literature search across three databases identified a total number of 9,456 records, including PubMed (n=410) ProQuest (n=523) Scopus (n=8,523). After removing 645 duplicates, 8,811 records were left for Title Screening. Total 8,440 records were excluded after title screening and remaining 371 records were screened for their abstracts. Following which 226 articles were retained for full text Screening. After applying the eligibility criteria 65 studies were included. The screening process is explained in *Fig 1.*

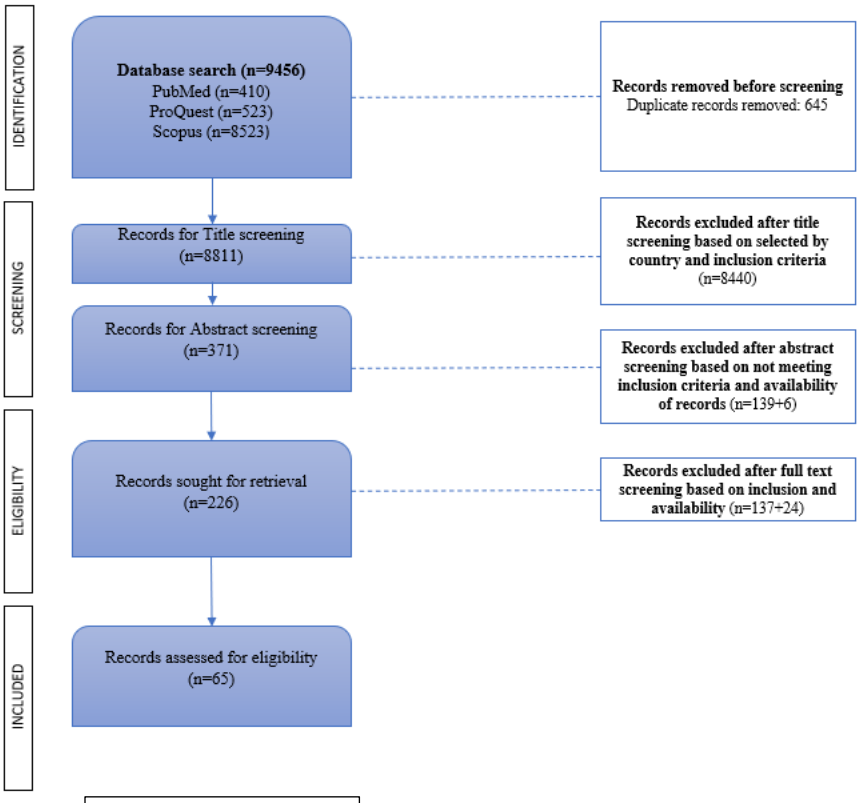



*Fig*1. Prisma Flow chart

## Overview of countries and Pro fertility polices identified

The 65 records included in this study represented a range of pro-fertility policies implemented across countries experiencing below replacement-level fertility. As several studies examined the same countries and policy initiatives, the number of unique countries represented was smaller than the total number of articles included. A detailed country-wise summary of the identified studies, policies, and key findings is presented in *Table 6.*

*Table6.* **Country-wise summary of included studies and pro-fertility policies.**

| Country | Article's | Policies | Findings |
|---|---|---|---|
| **Australia** | Determining the Impact of the 2004 Australian Baby Bonus on Fertility Rates Using a Synthetic Control Analysis (Reich G., 2024) | •Baby Bonus: One-time cash payment at childbirth to encourage births.<br>• Family Tax Benefit: Income-tested financial support for families with children, with higher payments for younger children and single-earner households.<br>• Child Care Subsidy: Government subsidy covering a proportion of childcare costs to improve affordability and workforce participation. | Australia's pronatalist policy primarily combines direct financial incentives with childcare subsidies to reduce the cost of raising children. |
| **Belarus** | Combating Low Life Expectancy and Low Fertility in Tumultuous Political Times (Kazimov & Zakharov, 2021). | •Universal child benefit system.<br>• Birth lump-sum grants.<br>• Family Capital Program for third and subsequent children.<br>• Housing and mortgage relief for large families | Belarus has adopted an explicit pronatalist approach that combines universal child benefits, birth grants, Family Capital, and housing assistance for larger families. The evidence indicates that these measures substantially reduce the financial costs of childbearing, particularly for higher order births. |
| **China** | 1.China's 2020 Fertility and Adoption of a Three-Child Policy (2021)<br><br>2. China's Family Planning Policy and Fertility Transition (Zhai & Jin, 2023) | • Three-Child Policy replacing previous birth restrictions.<br>• Birth subsidies and local cash incentives.<br>• Tax deductions for childcare and education.<br>• Extended maternity leave.<br>• Expansion of childcare services | China has shifted from a restrictive family planning system to an active pronatalist approach centred on the Three-Child Policy and supportive family measures. Across the |

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| | 3. China's Three-Child Policy (Tatum, 2021)<br><br>4. Changes in Fertility Intentions and Influencing Factors Among the Childbearing-Age Population Under the Three-Child Policy (Fan, Xia & Jia, 2025)<br><br>5. Changes in Policy, Changes in Fertility? An Examination of Changes in Fertility Aspirations in China (Blair & Dong, 2023)<br>6. Policy Response to Low Fertility in China: Too Little, Too Late? (Feng, 2017)<br><br>7. Navigating the Demographic Shift: An Examination of China's New Fertility Policy and Its Implications (Chan & Cheang, 2023)<br><br>8. Fertility Support under the New Adjustment of Family Planning Policy: Legal and Policy Perspectives (Guo, 2025)<br><br>9. State Childcare Provision in China: Subnational Variations and Localized Policy Contexts Across 31 Mainland Provinces (Liu & Dai, 2025)<br><br>10. Low Fertility and Fertility Policies in the Asia-Pacific Region (Boydell et al., 2023) | and public kindergartens.<br>• Housing support and other local family incentives.<br>• Measures to improve fertility and reproductive health services. | studies, policies have increasingly focused on reducing the economic costs of childbearing through financial incentives, childcare expansion, maternity leave, and family support services. |
| **Czech Republic** | 1. Changes in the Parental Benefit Scheme in the Czech Republic and Their Potential Impact on Reproductive Behaviour (Šťastná, 2019)<br><br>2. Children of the State? The Role of Pronatalism in the Development of Czech Childcare and Reproductive Health Policies (Hašková & Dudová, 2021) | • Parental allowance (Rodičovský příspěvek) with flexible payment options.<br>• Birth grant (Porodné) for low-income families.<br>• Parental leave and childcare support.<br>• Childcare and reproductive health policies. | The Czech Republic combines flexible parental allowances with targeted birth grants and childcare support to reduce the financial burden of raising children. |

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| | 3. Effectiveness of Family Policy in the Czech Republic (Kábelová & Arltová, 2021) | | |
| **Finland** | 1. Child Home Care Allowance and the Transition to Second- and Third-Order Births in Finland (Erlandsson, 2017) | • Universal child benefit (Lapsilisä).<br>• Paid maternity, paternity, and parental leave with earnings-related compensation.<br>• Universal public childcare with guaranteed access after parental leave.<br>• Flexible work arrangements (reduced working hours for parents).<br>• Baby Box (maternity package) or cash alternative. | Finland maintains a comprehensive universal family policy that combines cash benefits, generous parental leave, public childcare, and flexible employment arrangements. |
| **France** | 1. Political Measures against Declining Birthrate—Implication of Good Family Policies and Practice in Sweden or France (Karita & Kitada, 2018)<br><br>2. Reforms in Parental Leave Policies in France: Tensions between Budgetary Restrictions and the Promotion of Gender Equality (Fagnani & Math) | • Universal health coverage for pregnancy, childbirth, prenatal care, and postpartum services.<br>• Prenatal and family financial assistance, including income-adjusted child allowances and additional support for large, low-income, and single-parent families.<br>• Paid maternity and parental leave with childcare allowances and flexible work arrangements.<br>• Extensive childcare services, including public childcare centers, certified childminders, family daycare, and care for sick children.<br>• Recognition of diverse family structures, including civil partnerships (PACS). | France has developed a comprehensive and long-standing family policy system that combines healthcare, financial benefits, parental leave, childcare services, and employment support to reduce the costs of childbearing and childrearing. |
| **Georgia** | 1. Family Support Policy in Georgia: Challenges and Reform Options (Verulava, Jorbenadze & Silagadze, 2020) | • One-time childbirth assistance.<br>• Targeted regional child allowances.<br>• Means tested child support for vulnerable families.<br>• Limited maternity leave compensation. | Georgia's family support system consists mainly of targeted and regional financial assistance rather than a comprehensive national pronatalist program. |
| **Germany** | 1.Can Financial Incentives Reduce the Baby Gap? Evidence from a Reform in Maternity Leave Benefits (Raute, 2018) | • Elterngeld (earnings-related parental benefit).<br>• Income replacement of approximately 67% of pre-birth earnings.<br>• Minimum benefit for low- or | Germany's Elterngeld reform aimed to reduce the opportunity cost of childbearing by replacing a substantial proportion |

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| | | non-earning parents.<br>• Higher maximum benefit for high-income earners.<br>• Benefits payable for approximately 12–14 months, encouraging parental leave after childbirth. | of parents' lost earnings during parental leave |
| **Hungary** | 1.Certain Aspects of Family Policy Incentives for Childbearing—A Hungarian Study with an International Outlook (Sági & Lentner, 2018)<br><br>2. A családi otthonteremtési kedvezmény költségvetési terheinek előreszámítása, 2020–2040 (Tibor, Judit & Csaba, 2019)<br><br>3. Cash Support vs. Tax Incentives: The Differential Impact of Policy Interventions on Third Births in Contemporary Hungary (Spéder, Murinkó & Oláh, 2020)<br><br>4. Child and Family Benefits to Halt Hungary's Population Decline, 1965–2020: A Comparison with Polish and Romanian Family Policies (Szántó, 2021)<br>5.'All Planned Babies Must Be Born': Women's Experience of Infertility and Assisted Reproductive Technologies in Hungary (2022)<br><br>6. Trying to Reverse Demographic Decline: Pro-Natalist and Family Policies in Russia, Poland and Hungary (Cook, Iarskaia-Smirnova & Kozlov, 2023) | • CSOK (Family Housing Allowance): housing grants, subsidized housing loans, VAT refunds.<br>• Family tax allowance increasing with the number of children.<br>• Baby Loan: interest-free loan with partial/full debt forgiveness after childbirth.<br>• Child and family allowances and other direct cash transfers.<br>• Extended maternity, parental leave and childcare benefits.<br>• Publicly funded IVF/ART: nationalization of IVF clinics, free infertility medicines, up to five state-funded IVF cycles (with additional cycles under certain conditions).<br>• Marriage and family formation incentives and institutional support through family-focused government reforms. | Hungary has implemented one of the most comprehensive pronatalist policy packages in Europe, combining direct financial incentives, tax benefits, housing support, parental leave, childcare services, and publicly funded infertility treatment |
| **Iran** | 1. The Islamic Republic of Iran's New Population Policy and Recent Changes in Fertility (Ladier-Fouladi, 2021) | • The Youthful Population and Protection of the Family Law (2021).<br>• Marriage loans and financial incentives for young couples. | Iran has undergone a major shift from family planning to an explicitly pronatalist policy framework centered on |

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| | 2. A Pronatalist Turn in Population Policies in Iran and Its Likely Adverse Impacts on Reproductive Rights, Health and Inequality: A Critical Narrative Review (Asadisarvestani & Sobotka, 2023) | • Monthly subsidies, child benefits, tax reductions, newborn savings accounts, and food/health packages for large and low-income families.<br>• Extended paid maternity leave, flexible/remote work during pregnancy, employment protection, and incentives for married employees and parents.<br>• Housing support, including preferential housing access and subsidized housing loans linked to family size.<br>• Expansion of infertility services, insurance coverage for ART, and strengthening fertility clinics.<br>• Restrictions on reproductive health services, including reduced access to contraception, sterilization, abortion, and prenatal screening. | encouraging marriage and larger families |
| **Italy** | 1. A Change of Direction for Family Policy in Italy: Some Reflections on the General Family Allowance (GFA) (Dalla-Zuanna & McDonald, 2023)<br><br>2. FAMILY ACT: A "Revolution" in Italian Family Policies? (Solera, 2022)<br><br>3. All in, Against All Odds: Path Shift in Family Policy via Cross-Party Agreement – The Case of the Single Universal Allowance Reform in Italy (Madama & Mercuri, 2024)<br><br>4. Can Family Policies Enhance Fertility? An Ex Ante Evaluation Through Factorial Survey Experiments (Guetto, Alderotti & Vignoli, 2025) | • General Family Allowance (Assegno Unico Universale/GFA-AUUF) with income-related monthly child benefits.<br>• Additional supplements for larger families, young children, dual-earner households, and children with disabilities.<br>• Parental leave and paternity leave.<br>• Public childcare services and Family Act reforms supporting work–family balance. | Italy has shifted toward a more comprehensive family policy centred on the General Family Allowance (AUUF), replacing fragmented family benefits with a universal child allowance. The studies indicate that the reform reduced the financial burden of raising children and strengthened support for families across income groups. |
| **Japan** | 1. Socioeconomic Factors and Policies Regarding Declining Birth Rates in Japan (Iijima & Yokoyama, 2018)<br><br>2. Could the Child Benefit Save | • Child allowance (Jidō Teate) and tax deductions for dependents.<br>• Birth and childcare lump-sum grant.<br>• Paid maternity, paternity and | Japan has progressively expanded financial support, parental leave, childcare services, and fertility treatment to |

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| | the Low Fertility Country? (Asakawa, 2019)<br><br>3. The Policy Response to Declining Fertility Rates in Japan: Relying on Logic and Hope over Evidence (Schoppa, 2020)<br><br>4. Population Aging, Depopulation and the Workforce Shortage Crisis in Japan: An Overview of Nine Reversal Strategies and a Paradigm for a Macro-Research Agenda (Hayashida et al., 2025) | childcare leave with earnings-related benefits.<br>• Work-style reforms, including reduced working hours, telework, and promotion of fathers' leave.<br>• Expansion of childcare services and free early childhood education.<br>• Maternal and child health support.<br>• Infertility treatment support, ART subsidies, infertility leave, and local egg-freezing support. | reduce barriers to childbearing |
| **Poland** | 1.Cash Transfers and Fertility: Evidence from Poland's Family 500+ Policy (Bokun, 2024)<br><br>2. The 'Family 500+' Program as a Legal Instrument for Stimulating the Demographic Policy of the Country (Żywicka & Bieś-Srokosz, 2023)<br><br>3. The Role of Family Policy in Solving Demographic Problems: Study of the Polish Program Family 500+ (Wilk, 2020)<br><br>4. Regional Approaches to Demographic Change in Poland (Perek-Białas et al., 2017).<br>5. Fertility as an Object of Influence of Public Policies of the State (Kaźmierczak-Kałużna, 2023)<br><br>6. Trying to Reverse Demographic Decline: Pro-Natalist and Family Policies in Russia, Poland and Hungary (Cook, Iarskaia-Smirnova & Kozlov, 2023)<br><br>7. Child and Family Benefits to Halt Hungary's Population Decline, 1965–2020: A | • Family 500+ program (universal monthly child benefit).<br>• Child allowances and direct cash transfers.<br>• Childcare expansion and subsidized nursery services.<br>• Regional family support initiatives and demographic program. | Poland's pronatalist strategy is centered on the Family 500+ program, complemented by childcare expansion and other family benefits. |

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| | Comparison with Polish and Romanian Family Policies (Szántó, 2021) | | |
| **Romania** | 1. Child and Family Benefits to Halt Hungary's Population Decline, 1965–2020: A Comparison with Polish and Romanian Family Policies (Szántó, 2021)<br><br>2. Family Policies and the Evolution of Natality in Romania (Tráscan, 2025) | • Child-raising allowance (income-related parental benefit).<br>• Universal child allowance.<br>• Birth grants.<br>• Parental leave and family support benefits. | Romania's family policy combines income-related parental allowances, universal child benefits, and one-time birth grants to support families with children. |
| **Russia** | 1.Trying to Reverse Demographic Decline (Cook et al., 2023)<br>2. Combating Low Life Expectancy and Low Fertility (Kazimov & Zakharov, 2021)<br>3. Modern Fertility Trends in Russia and the Impact of the Pro-Natalist Policies (Archangelskiy et al., 2017)<br>4. More Money – More Births? (Biryukova & Sinyavskaya, 2021)<br>5. Pronatalist Demographic Policy in the Eyes of the Population (Maleva et al., 2017)<br>6. Intrahousehold Power in Russia and the Maternal Capital Law (Shelkova, 2018)<br>7. The Potential for Increasing Fertility and the Family Demographic Policy of Russia (Il'in et al., 2021)<br>8. Evaluating the Impact of the Population Policy on Fertility Rates in Russia (Kolbina, 2023).<br>9. Effectiveness of Demographic Policy Measures in Addressing Population Decline (Moiseev et al., 2024)<br>10. How the Everyday Logic of Pragmatic Individualism Undermines Russian State Pronatalism (Shpakovskaya & Chernova, 2022)<br>11. Demographic Momentum | • Maternity Capital Program.<br>• Monthly child allowances and income-tested benefits.<br>• Birth grants and family cash transfers.<br>• Mortgage subsidies and housing assistance for families with children.<br>• Regional pronatalist incentives targeting second and higher-order births. | Russia has pursued an extensive pronatalist strategy centred on maternity capital, cash transfers, housing support, and regional financial incentives. |

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| | and Fertility Responses to Pronatalist Policies (Kazenin et al., 2026) | | |
| **Slovakia** | 1. Some State Financial Segments of the Childbirth and Family Support System in Slovakia (Lentner & Horbulák, 2021). | • Child tax bonus linked to employment income.<br>• Cash transfers for dependent children.<br>• Subsidized housing loans for young families. | Slovakia's family policy primarily relies on financial support through tax benefits, child allowances, and housing assistance. |
| **South Korea** | 1.Childbearing and the Distribution of the Reservation Price of Fertility: The Case of the Korean Baby Bonus Program (Choo & Jales, 2021)<br>2. How Policy Configurations Matter: A Critical Look into Pro-Natal Policy in South Korea Based on a Gender and Family Framework (Lee & Zaidi, 2020)<br>3. Lowest-Low Fertility in South Korea (Kim & Luke, 2020)<br>4. Parental Leave Reforms in South Korea, 1995–2021 (Kim & Lundqvist, 2023)<br>5. Low Fertility in South Korea (Bak, 2023)<br>6. The Relationship Between Changes in the Korean Fertility Rate and Policies to Encourage Fertility (Jeong et al., 2022).<br>7. Evaluating Housing Policy Effects on Childbirth Intentions in South Korea (Kim & Jang, 2025)<br>8. The Predetermined Future: Tackling South Korea's Total Fertility Rate Crisis (Kim, 2025)<br>9. On Reproductive Straightening (Wolff, 2026)<br>10. Ultra-low Fertility and Policy Response in South Korea (Park, 2020)<br>11. Ultra-low Fertility in East Asia (Jones, 2019)<br>12. Low Fertility and Fertility Policies in the Asia-Pacific Region (Boydell et al., 2023) | • Birth grants and baby bonus programs.<br>• Universal child allowance and childcare allowances.<br>• Paid maternity, paternity, and parental leave, including father quotas.<br>• Expansion of childcare and preschool services.<br>• Housing support, subsidized loans, and public housing for young families.<br>• Work–family reconciliation policies and flexible work arrangements. | South Korea has implemented one of the world's most extensive pronatalist policy packages, combining financial incentives, parental leave, childcare expansion, housing support, and employment reforms. |

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| **Spain** | 1. Growing Pains: Can Family Policies Revert the Decline of Fertility in Spain? (Elizalde-San-Miguel, Díaz Gandasegui & Sanz, 2023) | • Paid parental leave (16 weeks for each parent).<br>• Child Benefit for eligible families.<br>• Public early childhood education and childcare services. | Spain has historically maintained a low-intensity and fragmented family policy system, with gradual expansion of parental leave and childcare services. |
| **Sweden** | 1. Political Measures against Declining Birthrate—Implication of Good Family Policies and Practice in Sweden or France (Karita & Kitada, 2018)<br><br>2. Do Leave Policies Impact Fertility? The Case of Immigrants from Low-Fertility Countries in Sweden (Mussino, 2022 | • Universal child allowance with supplements for larger families.<br>• Generous parental leave (480 days) with income replacement and reserved father quotas ("daddy quota").<br>• Temporary parental benefits during child illness and pregnancy allowance.<br>• Universal subsidized childcare with guaranteed placement, fee caps, and voucher system.<br>• Speed premium providing income protection for closely spaced births.<br>• Flexible work and work–family reconciliation measures. | Sweden has one of the world's most comprehensive gender-equal family policy systems, integrating generous parental leave, universal child benefits, and affordable childcare. Across the studies, policies that promote shared parental responsibilities, particularly father-specific leave, together with accessible childcare, reduce work–family conflict and support childbearing |
| **Ukraine** | 1. Combating Low Life Expectancy and Low Fertility in Tumultuous Political Times (Kazimov & Zakharov, 2021) | • Birth lump sum allowance.<br>• Means tested family assistance.<br>• Single parent support. | Ukraine relies primarily on birth grants and targeted income support rather than a comprehensive pronatalist policy package. |
| **United Kingdom** | 1. Political Measures against Declining Birthrate—Implication of Good Family Policies and Practice in Sweden or France (Karita & Kitada, 2018) | • Paid maternity leave and paid paternity leave.<br>• Flexible working rights for parents of young children.<br>• Childcare tax credits to offset childcare costs.<br>• Child Trust Fund for newborn children.<br>• Universal education and healthcare for children. | The United Kingdom adopts a relatively non-interventionist family policy approach, emphasizing work–family balance through parental leave, flexible employment, and childcare cost support rather than extensive direct cash transfers. |

The policies targeted different stages of family formation and child raising representing different governmental approaches to address the issue of population decline.

Generally, countries have implemented a combination of financial, social, housing, childcare and reproductive health initiatives to promote childbearing and to reduce the perceived barriers to family formation and fertility. On one hand some countries relied entirely on cash incentives while others implemented comprehensive blanket approach using a holistic combination of cash benefits, housing grants, generous parental leave provisions and Public funded Infertility treatment.

But financial tools were the most common method of intervention. It included schemes like one time baby bonus or birth grant, child allowances in the formative years of child, in some cases like Italy allowances are given till 21 years of age in case of dependent child(8). Tax credits, exemptions and subsidies based on number of children were some other forms of financial tools used to promote fertility and reduce the cost associated with children to encourage new parents.

Hungary came up with the most comprehensive pronatalist policy packages in Europe, combining a number of benefits like family tax allowances(9), housing subsidies(10), interest free baby loans, expanded maternity benefits, and state funded infertility treatment up to five cycles and more if any of those five cycles leads to successful birth(2). The country further strengthened its fertility strategy through the nationalization of IVF clinics and by providing free infertility medicines(2).

Poland's Family 500+ program provided monthly cash transfers to families with children and represents one of the largest family support initiatives in Central Europe(11,12). Similarly, Russia also implemented the Maternity Capital program, a substantial financial incentive with aim at second and higher order births, alongside mortgage subsidy schemes for families with children(5).

Employment related measures were commonly employed. Several countries provided generous leaves for both parents along with shared parental leave between both parents. Some countries provided flexible working arrangements with employment protection to reduce child

penalty among mothers to have children. Countries like Japan, South Korea, Sweden, France provide an extensive number of initiatives to reduce the opportunity cost and to promote labor force participation(13–15).

Support for early childhood care and development was another major policy area. Many countries expanded the existing childhood care facilities like daycare and nurseries and publicly funded them. Such measures can be especially useful for working parents.

Housing related benefits were also given in many countries with need to encourage housing independence and accelerating partnership formation like Hungary's CSOK which linked housing grants and subsidized loans to existing or children couple are planning to have(10), housing loan subsidies in Russia(5), housing assistances or preferences to families with kids in South Korea and China(14,16).

While few countries like Hungary and Poland either nationalized or publicly funded the infertility treatment for their population to provide a chance for infertile couples to have shot at parenthood(2). Hungary introduced publicly funded IVF treatment and infertility medicines(2), and Japan & Iran provided financial and institutional support for infertility treatment services highlighting the increasing recognition of infertility(7,17).

The review also noted there were several variations when it came to the target of these policies while some were universal and available to all countries, others specifically target first time parents or low-income households. While majority of the countries provided benefits only to married couples few European countries like France and Sweden recognized cohabitating couple as well(15).

## Classification of Pro fertility polices Using OECD framework

After the identification of policies in the relevant studies, policies were then classified based on OECD family policy framework. This framework identifies policies /measures into six categories. A) direct compensation for the economic cost of children, B) fostering employment, C) improving gender equity, D) support for early childhood development, E) poverty reduction, and F) Raising birth rates.(6) [Table 7]

Several countries implemented a array of polices or comprehensive package spanning multiple categories, reflecting the multi dimension approach to declining fertility.

*Table7.* **Classification of countries Policy into Six main types**

| Countries | Poverty reduction and income maintenance. | Direct compensation for the economic cost of children. | Fostering employment. | Improving gender equity. | Support for early childhood development. | Raising birth rates. |
|---|---|---|---|---|---|---|
| Hungary | | ✓ | ✓ | | | ✓ |
| Sweden | | ✓ | ✓ | ✓ | ✓ | ✓ |
| France | ✓ | ✓ | ✓ | | ✓ | |
| U.K. | | ✓ | ✓ | ✓ | ✓ | |
| Japan | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| South Korea | | ✓ | | ✓ | ✓ | ✓ |
| Italy | | ✓ | ✓ | ✓ | ✓ | |
| Iran | | ✓ | ✓ | | | ✓ |
| Germany | | ✓ | ✓ | | | |
| Poland | | ✓ | | | ✓ | |
| China | | ✓ | ✓ | | ✓ | ✓ |
| Czech Republic | | ✓ | | | | ✓ |
| Romania | | ✓ | | | | |
| Russia | ✓ | ✓ | | | | ✓ |
| Ukraine | ✓ | ✓ | | | | |
| Belarus | | ✓ | | | | ✓ |
| Australia | ✓ | | | | ✓ | |

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|---|---|---|---|---|---|---|
| Georgia | ✓ | ✓ | | | | ✓ |
| Spain | | ✓ | | ✓ | ✓ | |
| Slovakia | | ✓ | | | | ✓ |
| Finland | | ✓ | ✓ | | ✓ | |

(2,5,7–11,14,15,17–22)

Classification of the policies based on the OECD Family Policy Framework showed that direct compensation for the economic cost of children was the most frequently seen policy category, followed by fostering employment and early childhood development measures. Targeted birth rate raising policies, including IVF support, fertility treatment programs, marriage incentives, and housing schemes linked to childbearing, were identified in countries like Hungary, Iran, Japan, South Korea, China, Belarus, and Russia(2,5,7).Gender equity measures were comparatively less common and were concentrated mainly in Nordic countries such as Sweden and Finland and East Asian countries like South Korea(14,15).

# Unit4.

## Discussion

The scoping review identified a range of pronatalist policies implemented in countries e with below replacement level fertility. Despite their differences in policy design and society context, several common patterns emerged.

Using the OECD Family Policy Framework, direct compensation for the economic cost of children was found to be the most frequently used policy type. Child allowances, birth grants, tax benefits, and family cash transfers were widely used across countries such as France, Poland, Hungary, Finland, Belarus, and Russia(5,10,22). Their aim was to reduce the financial burden associated with childrearing.

Policies fostering employment and managing work family conflict were also common, particularly in Sweden, Finland, France, Germany, Japan, South Korea, and the United Kingdom(15,19,22). These included paid parental leave, flexible working arrangements, and employment protections designed to reduce the opportunity costs of parenthood.

Support for early childhood development through childcare services, expansion of daycares, and preschools was another major policy. Such measures seek to make childrearing more compatible with labor force participation.

The review further highlighted the growing use of fertility enhancing policies. Examples include Hungary's state-funded IVF program and fertility clinic nationalization, Japan's infertility treatment subsidies, and China's Three Child Policy(2). Housing-related incentives such as Hungary's CSOK program(10) and Russia's mortgage(23) subsidies also demonstrate the increasing use of nontraditional pronatalist measures.

Overall, the findings suggest that governments are increasingly relying on comprehensive policy packages rather than one single intervention, reflecting the complex web of factors influencing fertility behavior**.**

## Limitations

This study relied on studies identified through selected database searches and did not involve systematic search of government policy briefs. As a result, some policies might have been missing.

Second, some policies paper contained more information than others, with some nations like China and Hungary having multiple papers while some like Czech Republic having very sparse information.

And finally, this review gave no conclusion regarding the effectiveness of these policies, and several policies or interventions were overlapping in multiple categories and were then classified on the basis of implied context

## Conclusion.

The scoping review mapped Profertility policies implemented in countries with below replacement fertility and classified them using the OECD Family Policy Framework. The findings show that governments employ a diverse range of interventions.

Direct compensation for the economic cost of children was the most common policy type, followed by employment related and early childhood development measures. Several countries also adopted explicit fertility promoting interventions such as IVF support, fertility treatment subsidies, housing incentives linked to childbearing, and programs those were designed to encourage higher order births.

The review reflects that modern pronatalist policies are increasingly multidimensional. Future research should examine the effectiveness of these policy approaches and assess how different combinations of interventions influence fertility outcomes in context of ground realities of different nations**.**

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