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Hungary's Pro-Natalist Policies: the Case for Introducing a Baby Box Programme

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Hungary has pursued one of Europe's most ambitious pro-natalist policy agendas, but faces persistent challenges related to maternal health, early child development, and public trust in health services. Drawing on successful models from Finland, Scotland, the United States, and South Asia, this paper proposes the establishment of a Magyar Babadoboz (Hungarian Baby Box Programme): a national initiative providing newborn care packages to all new parents through the public healthcare system. Designed to promote safe sleep practices, early prenatal care engagement, maternal health literacy, and social inclusion, the programme would offer substantial public health and economic returns at a modest annual cost of approximately €14 million. The proposal outlines programme design, implementation pathways, cost analysis, and public engagement strategies, positioning the baby box as both a practical intervention and a symbolic reaffirmation of Hungary's family-centred national identity.

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Introduction

The Hungarian government has implemented one of Europe's most extensive pro-natalist policy frameworks, offering generous financial incentives, tax exemptions, and support for young families in response to declining European fertility rates. While these measures have shown notable success, continued demographic challenges underscore the need for complementary policies that not only incentivize childbirth but also promote maternal health, infant well-being, and public trust in social services.

One such opportunity is the introduction of a *Magyar Babadoboz* (Hungarian Baby Box Programme). Originating in Finland and now adopted in several countries, a baby box programme is a state-provided package of essential newborn supplies—including clothing, hygiene products, educational materials, and a safe sleep space—distributed to all new parents. Beyond its immediate practical benefits, the baby box has proven to promote early prenatal care, reduce health disparities, encourage safe infant sleep practices, and foster public trust in health and social services. It serves simultaneously as a public health intervention and a symbolic national gesture that every child is valued from birth.

The brief explores how a Hungarian baby box programme could build on existing family policy achievements and further strengthen maternal and child health outcomes. It is divided into two parts. The first part examines four case studies from Finland, the UK (Scotland), the United States, and South Asia (India and Bangladesh). In the U.S. case, I draw upon my experience as the founder of Babies Need Boxes, a nonprofit that partnered with hospitals and state agencies to pilot and implement baby box programmes across underserved communities. This firsthand perspective informs the analysis of challenges and opportunities in adapting the Finnish model to different policy environments. The second part charts a pathway for implementing a culturally-adapted, cost-effective baby box programme in Hungary, concluding in a recommendation to adopt it as a foundational, visible, and lasting pillar of Hungary's pro-family strategy—one that could serve as a lasting legacy of the current government.

Case Studies of Comparable Programmes

1. Finland

The baby box programme, originally named *äitiyspakkaus*, originated over a century ago as a grassroots volunteer initiative in Finland. In the early twentieth century, the country was a newly independent nation facing economic hardship following its separation from Russia in 1917. In response to widespread poverty, Finland passed legislation in 1922 requiring municipalities to care for the poor. Nonetheless, progress toward establishing a formal social security system was slow and complex [18] (Koskinen et al., 2011).

Recognizing the urgent need for maternal and infant support, especially during pregnancy and childbirth, communities stepped in to fill the gap left by the struggling government. In 1920, the Mannerheim League for Child Welfare was founded to address these needs. Within three years, the League's efforts, including establishing child welfare clinics and providing education on hygiene and childcare, reduced the national infant mortality rate from 15 to 3 percent [29] (Vuorenkoski, 2008).

The first iterations of the baby box were created by the League and distributed by a rapidly growing volunteer force to impoverished mothers. These boxes included hand-sewn baby clothes, basic hygiene supplies, and linens. Mothers would return the items after use so they could be redistributed to other families. Within five years, the League expanded to 180 chapters, all focused on supporting low-income families [18] (Koskinen et al., 2011).

By the late 1930s, the country's finances were in somewhat better shape, and Helsinki came to recognize the initiatives piloted by the Mannerheim League. In 1937, the government passed the Maternity Grants Act with the intention of supporting pregnant women. It provided either a cash benefit or a package of essential baby supplies to expectant mothers, aimed at alleviating financial stress related to childbirth and temporary loss of income [17] (Kela, 2013).

This was followed by the official state-sponsored baby box programme in 1938, launched in response to Finland's then-high infant mortality rate, standing at nearly 65 deaths per 1,000 live births. Initially available only to

low-income families, the programme aimed to ensure that all newborns had access to basic necessities and a safe start in life. It was a bold public health intervention and a powerful symbol of social equity.

In 1949, bolstered by its effectiveness and public approval, the Finnish government expanded the programme universally. From that point forward, every expectant mother who completed a prenatal check-up by the fourth month of pregnancy became eligible for the maternity package, a requirement significantly increased early prenatal care engagement [24] (*Scandinavian Journal of Public Health*, 2011).

By the early 2000s, Finland's infant mortality rate had dropped to just 2.3 deaths per 1,000 live births—one of the lowest in the world [33] (World Health Organization, 2019). Though this decline was due to a combination of public health interventions, global health organizations, including the WHO, have recognized the baby box as a contributing factor.

This can be partially explained by the modern baby box's arrangement. It includes 40–50 items, such as clothing, sleeping bags, blankets, bath and hygiene products, a digital thermometer, and educational materials. Consider the box itself, which includes a small mattress, allowing it to be used as a crib. This design encouraged safe sleep practices in a context where co-sleeping and unsafe sleeping environments had previously contributed to infant mortality [6] (*British Medical Journal*, 2018).

Moreover, the baby box's significance goes beyond healthcare outcomes. A 2011 study published in the *Scandinavian Journal of Public Health* [24] found that the maternity package, when combined with early prenatal care, helped reduce maternal health disparities between socioeconomic groups. Likewise, a 2018 review in the *British Medical Journal* [6] noted that universal maternity packages not only increase access to infant care resources but also foster trust in public health systems. According to a 2013 survey conducted by Kela, Finland's social insurance institution, more than 95 percent of first-time mothers opted for the baby box rather than the alternative cash grant, highlighting both the practical and emotional value of the box for Finnish families [17] (Kela, 2013). By providing all families—regardless of income—with the same package, the programme promotes dignity, inclusion, and social cohesion.

Programme outcomes and effectiveness

The Finnish baby box programme has demonstrated its effectiveness through several public health and social welfare outcomes, including the ones already noted above.

Early prenatal care remains a key component of the programme's success, with attendance incentivized through eligibility for the maternity package [29] (Vuorenkoski, 2008). The programme also ensures equitable access to newborn essentials, regardless of a family's financial background. A 2011 Finnish study published in the *Scandinavian Journal of Public Health* [24] found that the universal maternity package helped reduce health disparities between socio-economic groups by supporting low-income families with practical resources while encouraging early medical intervention [14] (Hiilamo & Kangas, 2011).

Importantly, the baby box promotes safe sleep practices, a critical factor in reducing the risk of Sudden Infant Death Syndrome (SIDS). According to a 2018 *British Medical Journal* review, universal maternity packages like Finland's normalize safe sleep environments and improve hygiene-related behaviors, which are associated with reductions in SIDS and other preventable infant mortality causes [6] (BMJ, 2018).

Another vital aspect of the baby box programme is its universality, which removes stigma and promotes social inclusion. A 2013 survey by Kela, Finland's social insurance institution, found that over 95 percent of first-time mothers chose the baby box over the alternative cash grant, underscoring both the emotional and practical value of the package [16] (Kela, 2013).

The programme fosters a powerful sense of national unity and parental confidence, contributing to social trust and psychological well-being. New parents report feeling supported and seen by the state, which can ease the mental and emotional burden of early childcare. According to the World Health Organization [33] (2019), Finland's investment in universal maternal and child health initiatives, like the baby box, has contributed to one of the world's lowest infant mortality rates and highest levels of public trust in health institutions.

Overall, Finland's baby box success lies in its holistic design, as it addresses economic support, health education, preventive care, and emotional

connection. In doing so, the Finnish government not only lowered infant mortality but also built one of the world's most trusted public health systems.

2. Scotland

Launched in August 2017, Scotland's Baby Box programme was directly inspired by Finland's long-standing success in improving maternal and infant health outcomes. The Scottish initiative aims to ensure that every newborn has an equal and healthy start in life by providing families with essential items for the first six months of care, similar to the Finnish initiative. Like Finland's baby box, each Scottish baby box includes around 40 items such as clothing, a digital thermometer, baby books, blankets, a bath towel, and a sturdy cardboard box with a mattress serving as a safe sleeping space. These contents are reviewed regularly to ensure cultural inclusivity, relevance, and alignment with current public health recommendations [25] (Scottish Government, 2021).

The Baby Box initiative is offered universally to all expectant parents regardless of income, as part of the Scottish government's broader strategy to tackle child poverty, support early parenthood, and improve population health outcomes. As of 2023, over 250,000 baby boxes have been delivered, reaching nearly 100 percent of all eligible families [27] (Social Security Scotland, 2023).

The programme is administered by Social Security Scotland, while its logistics and delivery are managed through a public-private partnership. Expectant parents receive a registration form during a prenatal appointment, typically between the 20th and 24th week of pregnancy, and the box is delivered to their home a few weeks before the due date. Health visitors frequently review the box's contents with families to reinforce safe sleep and childcare practices [25] (Scottish Government, 2021).

Each box costs approximately £330, including procurement, packaging, and distribution. With around 45,000 to 50,000 births annually, the programme's annual cost ranges between £16–17 million [2] (Audit Scotland, 2022). While some critics argue for a means-tested approach to reduce costs, the Scottish

Government defends the programme's universality as essential to reducing stigma and reinforcing social solidarity.

Programme outcomes and effectiveness

The Baby Box encourages early engagement with antenatal care, as parents must register during pregnancy. A 2021 interim evaluation found that over 90 percent of parents felt the box made them better prepared for their baby's arrival [25] (Scottish Government, 2021).

Midwives and health visitors use the box to educate families on safe sleep practices, SIDS prevention, co-sleeping risks, and infant hygiene, integrating the box into broader public health messaging. It serves both as a practice resource and as a symbol of state support and inclusion, reinforcing the idea that every child matters.

Parents report feeling reassured and emotionally supported, with the box creating a sense of recognition and equality, regardless of socioeconomic status [5] (Blake Stevenson Ltd., 2021). In a 2022 evaluation, more than 97 percent of parents opted to receive the box, reflecting strong public approval and demand [27] (Social Security Scotland, 2023).

The universal distribution of the box eliminates gatekeeping, avoids stigma, and fosters a shared national experience. Researchers emphasize that universality strengthens perceptions of fairness and promotes trust in public institutions—especially vital in maternal and child health services (Harkins et al., 2019).

Scotland's Baby Box programme represents an investment in its youngest citizens. Though not without fiscal or ideological criticism, the programme delivers measurable benefits in parental confidence, child safety, and social cohesion. As ongoing evaluations continue to examine long-term developmental outcomes, Scotland's initiative stands as a model of universal and preventive social policy, with the potential to inspire further child welfare innovations globally.

3. United States

Unlike the universal, government-funded baby box programmes in Finland and Scotland, the United States lacks a national baby box initiative. However, over the past decade, numerous state, local, hospital-based, and non-profit pilot programmes have emerged, aiming to promote safe sleep practices, reduce infant mortality, and offer support to new parents—particularly in underserved or high-risk communities.

U.S. baby box efforts began gaining momentum around 2016, with early pilots in New Jersey, Ohio, Alabama, and Texas. These initiatives were inspired by Finland's success and typically distributed cardboard boxes outfitted with a mattress, safe sleep literature, and newborn essentials. In many cases, parents were required to complete online education modules on infant care or SIDS prevention to receive the box [7] (Brehm et al., 2019).

In New Jersey, a statewide programme launched in 2017 through a public-private partnership with The Baby Box Co., becoming the first U.S. state to offer a baby box to all new parents. Similar efforts followed in California, Minnesota, and Texas, though none reached full statewide coverage. A 2019 evaluation of the Temple University Hospital baby box pilot found that 98 percent of participants considered the box useful, and 85 percent reported improved awareness of safe sleep practices [7] (Brehm et al., 2019).

Similarly, the Minnesota-based Babies Need Boxes initiative adapted Finland's *äitiyspakkaus* to underserved U.S. populations. The programme partnered with over 300 hospitals, clinics, and public health agencies across the United States to distribute baby boxes containing essential infant care items such as diapers, thermometers, wipes, and safe sleep materials, along with culturally relevant educational resources. Rooted in both public health and community-based care, the programme aimed to reduce infant mortality and promote safer sleep environments while strengthening between at-risk families and public health agencies.

What distinguished Babies Need Boxes was its dual emphasis on providing immediate material support and fostering long-term health literacy. The programme was intentionally designed not only to encourage safe sleep practices but also to strengthen early engagement between new parents

and healthcare providers, particularly in communities that often face barriers to prenatal care and postpartum follow-up.

Despite its impactful work, Babies Need Boxes ceased operations in 2019 due to challenges in securing sustainable funding and integrating with formal health systems. These limitations highlight the importance of embedding such programmes within a broader, state-supported infrastructure to ensure scalability and impact.

The lessons learned from Babies Need Boxes provide a compelling case for how culturally responsive interventions can inform the development of universal baby box policies in diverse policy environments, including Hungary.

Programme outcomes and effectiveness

Due to the decentralized nature of U.S. programmes, costs vary widely. Boxes typically cost between $70 to $150 each, depending on contents and volume. Funding sources include state health department grants, nonprofit organizations and private sponsorships, Medicaid-managed care organizations, and hospital system budgets. However, the absence

of federal coordination results in no centralized spending data, and many programmes face sustainability challenges due to reliance on short-term funding or philanthropy [35] (Jawed et al., 2023).

Evidence on the effectiveness of U.S. baby box initiatives is limited but growing. Studies and pilot evaluations suggest that the primary benefit lies in increased parent education and safe sleep awareness. The Temple pilot, for example, showed increased engagement with prenatal services and widespread parental satisfaction [7] (Brehm et al., 2019). Public health departments have also noted that using the box as a conversation starter improves healthcare provider communication with new parents.

Additionally, there are safety concerns with the construction of the baby boxes. The American Academy of Pediatrics [1] has cautioned that not all baby boxes meet recognized Consumer and Product Safety Commission safety standards for infant sleep. Without federal regulation, safety cannot be guaranteed. Some health professionals recommend using the box

mainly as an education tool rather than a primary sleep space [1]. The United States' baby box efforts represent a promising but fragmented attempt to support early parenthood and infant health. Although programmes have improved parental education and health service engagement, their non-universal, unregulated, and inconsistent structure limits broader impact. Without federal coordination or safety standardization, these U.S. initiatives fall short of the scale and success achieved in Finland or Scotland.

Still, their growing popularity underscores a national need for structured newborn support. Moving forward, integrating baby box programmes into maternal health policy, safety regulations, federal funding, and targeted social inclusion measures could offer a more effective and sustainable solution.

4. South Asia

Unlike government-funded universal baby box programmes in Finland or Scotland, *Barakat Bundle* is a non-profit initiative that provides life-saving maternal and newborn health supplies to underserved families in South Asia, particularly in India and Bangladesh. Founded by Dr. Neel Shah in 2014, the programme aims to reduce preventable maternal and infant mortality by distributing culturally-tailored "bundles" of essential health items through trusted community partners.

Barakat Bundle operates on a targeted, data-driven model, working closely with local community health workers, midwives, and NGOs to identify at-risk mothers in rural or underserved areas. Each bundle includes clean delivery kits, thermometers, baby clothes, educational materials, and in some cases, a low-cost sleeping mat or box to encourage safe sleep practices [4] (Barakat Bundle, 2023). The initiative emphasizes cultural relevance, with each item selected through local consultation to align with safe traditional practices and community needs. Bundles are distributed during the antenatal or perinatal period, often alongside maternal health education.

Programme outcomes and effectiveness

Unlike universal state-funded models, *Barakat Bundle* is sustained through philanthropy, private donations, university grants, and global health partnerships. Each bundle costs approximately $20–$30 USD to assemble and distribute, making it a cost-effective intervention in resource-limited settings [4] (Barakat Bundle, 2023).

Though smaller in scale than national programmes, *Barakat Bundle* has demonstrated significant impact. A 2021 internal evaluation showed increased utilization of clean birth practices and improved maternal health literacy among recipients. Over 90 percent of mothers who received the bundle used at least one item during childbirth or early infant care [26] (Shah et al., 2021).

Importantly, it fosters trust in health systems by involving local women and caregivers as delivery agents. *Barakat Bundle* offers a replicable, culturally sensitive model for maternal and newborn care in low-resource settings. Though not universal, its targeted and collaborative approach shows how tailored interventions can complement larger health equity goals and serve as a model for ethical, low-cost health innovation.

Hungary: Maternal Health Concerns and Birth Rate Initiatives in Hungary

Hungary, like many other Central and Eastern European nations, has faced a persistent demographic challenge: a declining birth rate and aging population. These trends threaten the long-term sustainability of social welfare systems and economic growth. In response, the Hungarian government has implemented a range of pro-natalist policies aimed at boosting fertility rates and supporting maternal health. These efforts provide a compelling case study in state-driven demographic intervention.

Maternal health in Hungary has improved significantly over the past few decades. According to a study by Nagy and Martos (2013), Hungary's maternal mortality ratio (MMR) dropped from 26.7 per 100,000 live births in the period 1978–1987 to 10.9 per 100,000 between 1997–2010. This

progress reflects enhancements in medical infrastructure, access to prenatal care, and public health education.

Similarly, the infant mortality rate fell to 4.2 deaths per 1,000 live births in 2015, the lowest ever recorded in the country [36] (Kozinszky et al., 2020). A major contributor to these improvements is Hungary's Visiting Nurse Service, established in 1916, which provides support during pregnancy and early childhood. The service promotes preventive care and early intervention, ensuring that pregnant individuals receive timely and comprehensive health services [36] [(Kozinszky et al., 2020).

However, not all trends are positive. One concern is the increasing rate of cesarean sections, which rose to 35 percent in 2012, compared to 28 percent in 2005, raising questions about the medicalization of childbirth and its long-term implications for maternal health [36] (Kozinszky et al., 2020).

Public sentiment toward Hungary's healthcare system remains mixed. A 2019 global survey by Statista found that 53 percent of Hungarian respondents reported satisfaction with their national health system, placing Hungary near the middle of surveyed countries in terms of public confidence [28] (Statista, 2019). However, research on patient experiences, particularly regarding communication and involvement in decision-making, indicates that Hungary lags behind OECD averages [11] (Gaál et al., 2019). Overall, Hungary's healthcare system is functional but still struggles with patient-centered care and transparency.

In terms of maternal healthcare utilization, Hungary boasts high engagement. Over 94 percent of pregnant women receive antenatal care services [12] (GFMER, n.d.). These services are widely available in urban centers, while mobile units help serve smaller rural communities. Although antenatal visits are not mandated by law, attendance is incentivized through financial benefits tied to maternal health check-ups, encouraging early detection of complications and healthier pregnancy outcomes [12] (GFMER, n.d.).

The use of formal healthcare services during childbirth is also widespread. A study analyzing data from over 4,000 births between 2015 and 2018 found that nearly all mothers gave birth in medical institutions, reflecting high institutional trust and infrastructure availability [34] (Engler, 2021).

However, over 60 percent of women reported making informal payments, or "gratitude payments," to healthcare providers during maternity care (Baji et al., 2017). This practice introduces concerns, particularly for lower-income families who may struggle to access the same perceived level of service without such payments.

Government Initiatives to Boost Birth Rates

The Hungarian government has enacted an aggressive suite of family-oriented policies under Prime Minister Viktor Orbán's administration. These initiatives emphasize traditional family values and aim to make childbearing financially and logistically feasible.

One of the cornerstone policies is a housing subsidy programme known as the Family Housing Allowance Programme (CSOK), which offers up to 10 million HUF (approximately €27,000) in grants to families with three or more children, along with favorable mortgage conditions (Wikipedia, 2023). These measures are designed to reduce the cost burden associated with raising children and purchasing family housing.

Hungary provides generous tax exemptions for parents. Notably, mothers with four or more children are permanently exempt from paying personal income tax (Politico, 2023). The government's rationale is to incentivize larger families by rewarding long-term childrearing commitments.

Newly married couples in Hungary are eligible for generous financial benefits as part of the government's broader strategy to promote early and stable family formation. A central component of this policy is the "baby-expecting loan" programme, which offers an interest-free loan of up to 10 million HUF (approximately €30,000) to couples who marry before the bride turns 41 (Euronews, 2019). The loan includes child-linked incentives: if the couple has a child within five years, the interest is suspended indefinitely and repayments are paused for three years; a second

child brings another three-year deferment and partial loan forgiveness; a third child leads to full loan cancellation (Euronews, 2019). This structure effectively transforms the loan into a grant for families who meet the childbearing criteria.

These policies are intended to lower the economic barriers to starting a family and have resulted in measurable outcomes. In the first nine months of 2019, Hungary saw a 20 percent increase in marriages compared to the previous year, the highest marriage rate since 1990 (Reuters, 2019). However, while marriage rates rose, the number of births declined by 1.6 percent during the same period, with the total fertility rate at 1.48 births per woman, still below the replacement level of 2.1 (Catholic News Agency, 2019).

In addition to the baby-expecting loan, the government also offers subsidies for purchasing family vehicles, tax exemptions for mothers with four or more children, and even childcare support for grandparents (European Centre for Law and Justice [ECLJ], 2020). These multifaceted incentives underscore Hungary's determination to address demographic decline through financial means.

Investment in public childcare infrastructure has been a crucial part of Hungary's strategy to support working families and boost fertility rates. The Hungarian government, in partnership with the European Investment Bank (EIB), has financed major improvements in education infrastructure, including the construction and modernization of kindergartens and preschool facilities across the country [9] (European Investment Bank, 2015).

These developments align with national policies such as the mandatory pre-school attendance from age three and daily physical education for school children. Furthermore, Hungary's early childhood education system is primarily state-funded, making kindergarten free of charge and widely accessible. These efforts are designed to enable parents, particularly mothers, to return to work without sacrificing family responsibilities.

Programme outcomes and effectiveness

Hungary's family policies have led to some measurable improvements. The total fertility rate increased from 1.25 children per woman in 2010 to approximately 1.6 in 2020 [8] (*European Conservative*, 2023). Marriage rates also rose significantly, which some researchers attribute to the financial and cultural incentives promoting family life (Wilcox, 2023). These trends

suggest that the policies are having an effect, particularly in terms of aligning economic support with cultural narratives around family and motherhood.

Nonetheless, in early 2024, Hungary's fertility rate dipped below 1.4 births per woman again, raising concerns about the long-term sustainability of state-sponsored demographic engineering (*The Times*, 2024). Analysts argue that while financial incentives can produce short-term gains, they may not sufficiently address deeper cultural and structural factors, such as changing gender roles, economic insecurity, and delayed family planning among younger generations (*Wall Street Journal*, 2024). Critics also note that Hungary's high cesarean rate highlights weaknesses in maternal healthcare, and some warn that pro-natalist policies risk pressuring women into traditional roles, limiting personal agency in favor of national demographic goals [36] (Kozinszky et al., 2020).

Integrating a Baby Box Programme into Hungary's Family Policy Framework

Hungary has become a prominent example of pro-natalist policy making in Europe, with a sweeping array of initiatives aimed at reversing population decline. Hungary's approach to maternal health and birth rate promotion is ambitious and multifaceted. It combines targeted financial incentives, tax relief, housing support, and expanded childcare services to encourage family growth.

Long-term success will require addressing not just economic barriers but also cultural and healthcare factors that influence reproductive decisions. A sustainable demographic strategy ought to support all sorts of families and prioritize maternal autonomy. Hungary's family policy framework strongly incentivizes marriage and childbirth. A baby box programme, offering newborns a safe sleep space and parents a starter kit of infant care items, could dovetail seamlessly into Hungary's existing family-centered strategy, offering low-cost, high-impact benefits that complement current efforts.

Hungary possesses a robust and integrated healthcare infrastructure that is particularly well-suited to supporting the implementation of a national baby box programme. The foundation of maternal and child healthcare in Hungary includes a wide-reaching network of public health nurses (*védőnők*), maternity hospitals, and local family clinics.

The *védőnő* system, established over a century ago, is a unique and longstanding element of Hungarian healthcare. These trained public health nurses play a vital role in providing prenatal care, postnatal support, and early childhood development monitoring. Their community-based approach ensures that even families in remote areas receive guidance and services, making them ideal facilitators for baby box education and distribution [36] (Kozinszky et al., 2020).

A national baby box programme could be seamlessly integrated into the current prenatal and perinatal care pathways. Baby boxes could be distributed during key prenatal visits, such as when expectant mothers register for maternity care or attend their first trimester ultrasound appointment. Alternatively, distribution could occur immediately following delivery at maternity hospitals, allowing healthcare providers to reinforce newborn safety education and maternal self-care practices while the mother is still under professional supervision.

Health visitors could offer personalized instruction on the contents of the box, including safe sleep practices, breastfeeding tips, hygiene products, and developmental tools such as books or toys, thereby strengthening parental knowledge and confidence [19] (Lee et al., 2020).

To ensure logistical consistency and fair access, the baby box initiative could be centrally coordinated by Hungary's Ministry of Welfare and Family Affairs. A centralized system would streamline procurement, quality control, and distribution protocols. Local municipalities, which already manage aspects of family support services, could serve as administrative and logistical partners. This model would allow efficient nationwide deployment while maintaining flexibility at the community level [10] (European Observatory on Health Systems and Policies, 2022).

In rural and underserved areas, where access to physical clinics may be limited, mobile health clinics and outreach teams could be employed to deliver baby boxes and accompanying education. Hungary already operates mobile health units in remote areas as part of its public health strategy, particularly for preventive services such as screenings and immunizations [12] (GFMER, n.d.). These mobile services, supported by regional health authorities, could be leveraged to distribute baby boxes and provide

culturally sensitive, context-specific care to families who might otherwise face barriers to participation.

This inclusive approach would help bridge health equity gaps and ensure that all newborns, regardless of their geographic location or socioeconomic status, receive a fair and supportive start in life.

Moreover, integrating baby box distribution with existing digital health infrastructure, such as the Electronic Health Service Space (EESZT), would allow authorities to track participation, assess outcomes, and ensure continuous quality improvement. These data could support longitudinal studies of maternal and infant health, facilitating evidence-based adjustments to the programme over time [11] (Gaál et al., 2020). Hungary's established maternal health system, combined with its strong administrative capacity and wide-ranging public health workforce, provides an ideal platform for the integration of a baby box programme. With thoughtful coordination and equitable delivery, such a national baby box programme could strengthen Hungary's mission to support families, lower infant mortality, and promote maternal well-being from the earliest stages of life.

Hungary's family policies already reflect a strong focus on early childhood development. For example, prenatal check-ups are incentivized through eligibility for maternity benefits, and the country maintains a longstanding Visiting Nurse Service to support new mothers and children [36] (Kozinszky et al., 2020).

Adding a baby box programme would provide a tangible reinforcement of the government's message: that every child is valued from the very beginning of life. This would align with Hungary's cultural emphasis on traditional family values and reinforce the symbolic and practical support given to new parents.

Moreover, baby box programmes offer an opportunity to promote maternal health literacy, which remains an area of concern in Hungary. While over 94 percent of women utilize antenatal services [12] (GFMER, n.d.), research has revealed shortcomings in patient–provider communication and maternal empowerment [11] (Gaál et al., 2019). Distributing baby boxes through healthcare channels, such as hospitals or community nurse visits, could

serve as a platform for education on safe sleep, breastfeeding, postpartum care, and infant bonding. This would help address gaps in care continuity while building trust between mothers and the healthcare system.

The scalability and affordability of baby box programmes further support their inclusion in Hungary's policy mix. In Finland, each baby box costs approximately €170, and similar programmes have been implemented at relatively low costs in other nations, especially in South Asia. Compared to the large-scale tax exemptions and loans Hungary currently offers, a baby box initiative would be a cost-effective complement with disproportionately high public health benefits [10] (European Observatory on Health Systems and Policies, 2022).

The programme would also help reach disadvantaged populations, such as low-income or rural families, by offering equal material support and encouraging engagement with early health services.

Cost Analysis

The estimated cost per baby box in Hungary is approximately 60,000 HUF (roughly €155), including essential items such as infant clothing, hygiene products, baby bedding, a certified safe-sleep cardboard box with a mattress, printed educational materials, and logistical handling, including assembly and distribution. This estimate aligns with the cost of Scotland's baby box programme, which is valued at approximately £160 per box, including contents and distribution.

To potentially reduce costs, Hungary could explore sourcing certain non-perishable items, such as clothing, blankets, and hygiene supplies, from manufacturers in countries like India or China, where production costs are lower. However, strict quality control would be needed to ensure compliance with EU safety standards and local health guidelines.

With approximately 90,000 live births per year in Hungary [15] (Hungarian Central Statistical Office [HCSO], 2023), the total annual expenditure to fund a universal baby box programme would be around 5.4 billion HUF or €14 million. Although this cost may seem considerable, it is relatively modest when viewed in the context of Hungary's broader family policy

expenditures, such as the housing subsidies and interest-free loans for married couples, which can cost billions annually (European Parliamentary Research Service, 2022).

More importantly, a baby box programme offers long-term public health and economic returns that far exceed the upfront investment. For example, Finland's long-running baby box programme has been credited with contributing to one of the lowest infant mortality rates in the world, in part by encouraging early interaction with health services [21] (Montgomery et al., 2021). These early interventions help prevent avoidable health complications, reducing healthcare costs over time.

Evidence also suggests that baby box programmes enhance parental confidence and promote equitable access to essential newborn supplies, especially for low-income or marginalized families [19] (Lee et al., 2020). In a randomized trial in Scotland, new parents who received a baby box reported feeling more supported and prepared for early parenthood compared to those who did not, leading to increased maternal well-being and stronger early bonds [31] (Skea et al., 2022).

In the Hungarian context, where informal payments and inequalities in maternal care still pose barriers [3] (Baji et al., 2017), a universally accessible baby box could help reduce disparities by ensuring every newborn receives a standard level of care and support.

Moreover, the programme could contribute to Hungary's domestic economy if the baby box and its contents are sourced from local manufacturers. Clothing, hygiene items, printing materials, and even the boxes themselves could be produced by small and medium-sized enterprises, providing a boost to local industries and stimulating job creation.

In this way, the programme not only invests in the health of future generations but also reinvests public funds into national economic development, aligning with Hungary's economic sovereignty and family-centered policy goals.

Public Engagement and Visibility

For a national Baby Box Programme to succeed in Hungary, it must be supported not only by sound policy infrastructure but also by a strong public awareness and engagement strategy. Public buy-in is critical for both participation and long-term sustainability, especially for programmes that intersect with cultural norms, parenting practices, and healthcare behaviors.

A national media campaign could celebrate the arrival of every newborn while promoting the broader goals of prenatal care, maternal well-being, and early childhood support. The central message could emphasize that every child is valued from birth "*Minden baba számít*" ("Every baby matters") underscoring the government's family-centered values and drawing on Hungary's existing pro-natalist narrative.

A successful awareness campaign should utilize multiple communication channels, including television and radio public service announcements, print advertisements in maternity clinics and pharmacies, and a strong digital presence through social media platforms and influencer partnerships. Storytelling through real-life testimonials, featuring a diverse array of families who have benefited from the programme, can personalize the initiative and strengthen public trust. Emotional appeal and social modeling have been shown to significantly increase the effectiveness of public health campaigns [30] (Wakefield et al., 2010). These stories could also be featured in regional town halls and community meetings, particularly in rural areas where informational access may be limited.

Strategic partnerships with key stakeholders would further extend the reach and legitimacy of the campaign. Collaborations with pediatricians, family physicians, midwives, hospitals, maternity brands, and NGOs that focus on maternal and child health could create a seamless and trusted network of programme advocates.

Hungary's *védőnő* (health visitor) system, which already maintains contact with nearly all expectant and new mothers, would be a vital partner for outreach, education, and reinforcement of the box's intended uses [36] (Kozinszky et al., 2020). In Scotland, for example, a similar approach

contributed to high levels of parental satisfaction and uptake of their national baby box programme, with over 95 percent of eligible families accepting the box within its first year [31] (Skea et al., 2022).

Public engagement could be further amplified through ceremonies marking the launch or delivery of the first boxes. For instance, a high-profile public ceremony where the Prime Minister or Minister of Family Affairs presents the first baby box to a new family could demonstrate the government's commitment and attract media coverage. Rituals like these serve a dual purpose: they elevate the perceived value of the programme and generate emotional connection with the public [20] (Bell, 1997).

Additional opportunities for engagement could include Baby Box roadshows in shopping centers or maternity expos, workshops led by health professionals, or digital campaigns using hashtags to build online momentum.

By combining policy, partnerships, and powerful communication, the Baby Box Programme could be framed not simply as a public health tool but as a national symbol of shared responsibility, social solidarity, and investment in future generations. This integrative approach would help ensure that the programme is seen not just as a government handout, but as a cultural affirmation of life, care, and equality for every Hungarian child.

Conclusion

Hungary has made major investments in financial incentives to encourage childbearing, but sustaining long-term demographic resilience will require complementary action that delivers measurable dividends at a modest cost. A *Magyar Babadoboz* (Hungarian Baby Box) Programme would represent exactly that: a low-cost, high-impact initiative that strengthens maternal and infant health, improves early engagement with healthcare services, and reduces long-term public health expenditures Compared to the billions spent annually on housing and subsidies and tax exemptions, a national baby box programme would require only a fraction of the budget while offering disproportionate returns in health, social trust, and early childhood development.

By integrating a baby box programme into existing health infrastructure, Hungary can build on its successful *védőnő* system and maternity services, providing universal, tangible support to all new families. The programme's simplicity and universality would help bridge socioeconomic divides, reinforce maternal health education, and offer visible proof that every child is valued equally. It would also enhance the effectiveness of Hungary's broader family policy portfolio by delivering benefits that are immediately felt by parents and measurable by health outcomes, rather than solely relying on long-term financial incentives.

More than a policy tool, the *Magyar Babadoboz* would symbolize a national commitment to life, care, and shared responsibility. In adopting it, Hungary would not only continue its global leadership in family-centered policy, but also demonstrate that *true* demographic renewal rests on building strong families, healthy beginnings, and a society where every new life is celebrated with tangible, meaningful support.

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