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A Brighter Future: An Investment Case in Early Childhood Development in Ukraine

Final report

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Abbreviations

Abbrev.	Meaning
AA	Association Agreement (with the European Union)
AIM	Access and inclusion model
AoR	Ukraine Child Protection Area of Responsibility
BCR	Benefit cost ratio
CBA	Cost benefit analysis
CBR	Cost benefit ratio
COI	Cost of inaction
DALY	Disability adjusted life year
ECD	Early childhood development
ECE	Early childhood education
ECEC	Early childhood education and care
EU	European Union
FPF	Financial programming framework
FSA	Fiscal space analysis
GBV	Gender based violence
GDP	Gross domestic product
GGE	General government expenditure
GNI	Gross national income
GoU	Government of Ukraine
IDP	Internally displaced person
IMF	International Monetary Fund
IOM	International Organization of Migration
IQ	Intelligence quotient
IRC	International Rescue Committee
LAY	Learning adjusted years of schooling
LiST	Lives Saved tool
MHPSS	Mental health and psychosocial support
MNCH	Maternal, newborn and child health
NBU	National Bank of Ukraine
NGCA	Non-government controlled areas
ODA	Overseas development assistance
OECD	Organization for Economic Co-operation and Development
OHT	One Health tool
PER	Public expenditure review
PETS	Public expenditure tracking survey
PFM	Public financial management
PTSD	Post-traumatic stress disorder
RDNA	Rapid damage and needs assessment
RTI	Refugee Trauma Initiative
SDG	Sustainable Development Goal
SDR	Social discounting rate
SEN	Special extra needs
UAH	Ukrainian Hryvnia
UK	United Kingdom
UN	United Nations
UNCRPD	UN Convention on the Rights of Persons with Disabilities
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
USD	United States Dollar
VAT	Value added tax
WASH	Water, sanitation, and hygiene
YLD	Years of health life lost due to disability
YLL	Years of life lost due to premature mortality

Definitions

For this report, the following definitions have been adopted.

Benefit cost ratio attempts to identify the relationship between the costs and benefits of a proposed project or scale up. A ratio of more than 1 identifies a proposition as cost-effective, as the benefits out way the costs.[1]

Capital costs are fixed, one-time expenses required to run a business or operate a service. Examples include the purchase of land or renovation of a building.

Childcare involves looking after the physical, psychological, emotional, and developmental needs of one or more children. It can be provided by primary caregivers (including parents), by extended family or household members, within the community, or in institutional settings, such as within kindergartens.

Cost benefit analysis is the process of comparing the projected or estimated costs and benefits associated with scaling up a certain intervention or proposition.[2]

Cost of Inaction refers to the gains that will not be realised if an intervention is not scaled-up. This is usually expressed in monetary terms and depicts the economic gains that will never be realised.[3]

Disability adjusted life year (DALY) represents the loss of the equivalent of one year of full health. DALYs for a disease or health condition are the sum of the years of life lost (YLLs) and the years lived with disability (YLDs) due to prevalent cases of a disease or health condition in a population.[4]

Early childhood development (ECD) is defined as the period from conception to school entry. It is a unique window of opportunity for children's cognitive, social, emotional, and physical development. This development occurs as the result of the interaction between the environment and the child.[5]

Early childhood education and care (ECEC) refers to education and care usually provided in institutional settings to children between the ages of one and six. ECEC has two main aims. The first is to provide children with physical, emotional, social, and language skills to allow them to become empowered persons with life-long learning capabilities. The second is to provide childcare for parents/caregivers (primarily women). These services may often be referred to as kindergarten, preschool, or pre-primary education.[6]

Integrated early childhood development refers to a holistic approach to ECD, drawing in different sectors, such as education, health, social protection, and child protection. An integrated approach can help ensure good child growth and development.[7]

Recurrent costs occur on a regular basis and are necessary for the ongoing operation of a business or provision of a service. Examples include salaries or rental fees.

Years of life lost (YLLs) involves multiplying the deaths that occur at each age from a specific disease by the number of remaining years left to live up to a specified age limit (such as 75).[8]

Years of life lived with disability (YLD) refers to the number of years an individual lives not at full health. One YLD represents the equivalent of one full year of healthy life lost due to disability or ill-health.[9]

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Executive Summary

Key Messages

This Investment Case provides clear evidence of the social, economic, and political returns on increased investment in early childhood development (ECD) in Ukraine.

The benefits of expanding access to quality ECD services vastly outweigh the costs. This Investment Case demonstrates benefit-cost ratios as high as 9.1 to 1. Failure to invest in ECD will come at an even higher cost. By 2050, in each ECD sector, the **cost of inaction** may be as high as between **UAH 128 and 451 billion**. The adoption of integrated, holistic, cross-sectoral approaches is key to maximising cost effectiveness.

Greater access to quality ECD **will promote economic growth** through developing **human capital, returning women and children to Ukraine,** creating **employment opportunities**, and increasing. the **integration of women into the workforce.** This is critical against the backdrop of an ageing population.

Ukraine's accession to the European Union requires increased and improved investment in ECD service, and in particular **deinstitutionalisation and childcare reform.**

There are concrete **options available to finance these investments.** This study's Fiscal Space Analysis identifies numerous pathways to closing the financing gap.

Background

Extensive research shows that the early years of a child's life really matter. Interventions in ECD can support development and increase the likelihood of long-term wellbeing, productivity, and prosperity, both at an individual and at a societal level. In Ukraine, ECD is vital and will play an invaluable role in the recovery from the war.[10] Investing in ECD will help create a society that people want to return to; this is particularly important given the high number of families, mainly women with young children, who have left the country. Situated in the context above, the overall objective of this project is to provide evidence justifying the importance of investing in a holistic set of ECD interventions in Ukraine, thus boosting financial allocations to sectors that deliver ECD.

To deliver on this objective, the project was comprised of four major components:

1. **Evidence review:** Compiling global and national evidence on the case for investment in ECD on the Ukrainian context and on the status of ECD. Submitted with the inception report (Section 2).
2. **Investment case:** Analysing the costs and benefits of an agreed package of ECD interventions, with detailed reference to the evidence for these benefits (Sections 3, 4).
3. **Fiscal space analysis:** Providing, through a financial analysis, an overview of economic and fiscal trends in Ukraine, as well as current spending, on ECD by a wide range of stakeholders (Section 5).
4. **Roadmap:** Creating a framework to support the government and its partners in implementing the recommended intervention scale-ups (outline in Annex 1). The roadmap will be developed during the study team's final mission to Ukraine.

[10] While the war in Ukraine began in 2014, references to "the war" in this report refer to the full-scale war that began on 24 February 2022, unless otherwise specified.

Methodology

Package of interventions: This Investment Case examines the scale-up in coverage of a set of ECD-specific services. Most of these services are already being implemented in Ukraine. Thus, this study analyses the economic case for increasing the coverage to universal (or near universal) levels.

Three methods were used while developing the Investment Case:

1. Economic appraisal: Cost-benefit and cost-of-inaction analyses calculated by presenting the total monetised benefits of the intervention, minus high-level cost estimates. Three scale-up scenarios were modelled: scale-up to target coverage (typically 100% of targeted users) by 2030, 2040, and 2050. The methodology for modelling costs and benefits varies from sector to sector.
2. **Literature review:** A desk-based literature review was conducted to provide evidence into the benefits of interventions that could not be included in the economic appraisal (see limitation #2 below).
3. **Primary data collection:** Key informant interviews were conducted in early childhood education and care (ECEC) in Chernihiv and Dnipropetrovska Oblasts to obtain a deeper understanding of the status of ECD in Ukraine.

There are some **limitations** to this study, which are detailed below:

1. Recent data from Ukraine was used to model interventions wherever possible. Where data was not available, regional assumptions have been used instead. Ukraine-specific data typically predates the full-scale war.
2. Modelling the monetised benefits of interventions requires rigorous evidence of the long-term impacts of the interventions on children. Where this data was unavailable, those interventions were excluded from the economic appraisal, and a literature review into the benefits of these interventions was conducted.
3. Investment case costing is high-level and should not be used in place of detailed costing.
4. National-level financing data has been used for the fiscal space analysis.

Early Childhood Education and Care (ECEC)

The Investment Case examined a package of ECEC interventions (Although the final two interventions were critical, they could not be included in the economic modelling):

Table 1. The ECEC Package

Service	Baseline	Target
Quality childcare provision (for infants 6 months – 2-year-old)	33%	100%
Quality early childhood education (ECE) (for 3–5-year-olds)	91%	100%
Quality pre-primary education (for 5–6-year-olds)	73%	100%
Additional supports for children with disabilities	N/A	N/A
Mental health support in ECEC programmes	N/A	N/A

Key Findings

- Total economic benefits from the fast scale-up scenario could be as high as UAH 522 billion between 2023 and 2050, producing a return on investment of 5.1. The cost of inaction could be as much as UAH 419 billion across the same time horizon.
- Investments in ECEC are likely to increase the years of schooling received by each child. The fast scale-up scenario could improve the average years of schooling each child receives by 0.37, bringing Ukraine up to 13.3 years per child. This would be in line with other European countries, such as Greece and Serbia.
- Investments in ECEC will free up more time for caregivers, mainly women, to return to the labour market. The Investment Case found that, under the fast scale-up scenario, 350,000 caregivers would be able to return to the labour market by 2030 as their children would then be in ECEC settings. This would have a significant impact on female labour force participation as caregivers are predominantly women.

- Finally, investments in ECEC will generate meaningful employment opportunities for Ukrainians, predominantly women. It is estimated that an additional 9,846 (slow scenario) to 16,717 (fast scenario) new staff members would be need annually to match the scale-up needs. The additional staffing needs created would also help increase female labour-force participation.

Ukraine stands to benefit significantly from increased investment in ECEC in both the long- and short-term. A strong ECEC system will help people return to Ukraine and will also ensure that children grow and develop into prosperous working-age adults. The added benefits of women participating in the labour force will also encourage families to return, particularly as many of those who left have been young women with children.

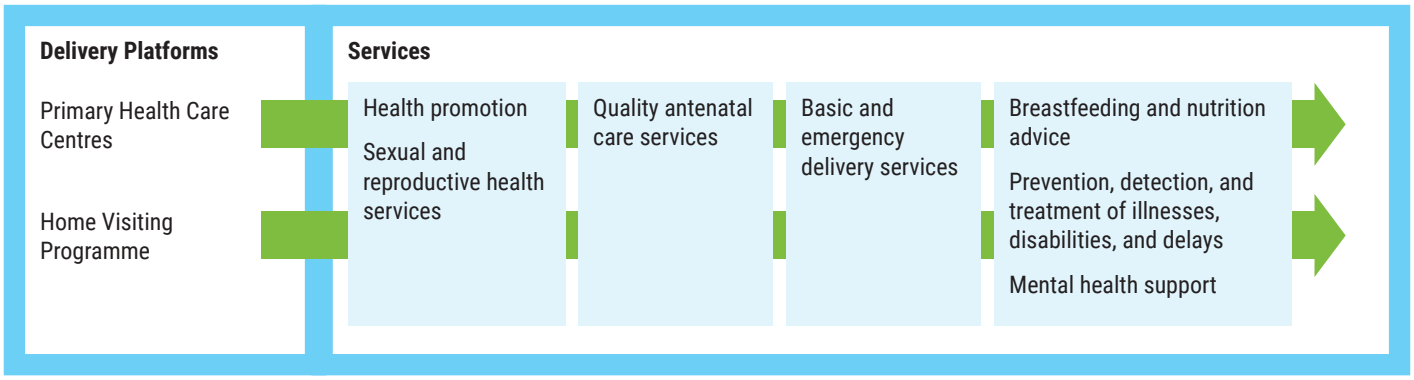
Table 2. Economic Benefits, Costs, Benefit-Cost Ratio, and Cost of Inaction, in UAH billions, discounted by 5%

	Fast	Medium	Slow
Total Costs	103	82	61
Total Benefits	522	393	261
Benefit-Cost Ratio	5.1	4.8	4.3
Cost of Inaction	**419**	**311**	**200**

Health and Development

Drawing on the Nurturing Care Framework, key interventions have been selected to form a relevant, ambitious health and development package for Ukraine. The services and platforms used to deliver them are outlined below. A full list of the 43 interventions is included in the Annex.

Table 3. Health and Development Package



Key findings

- The benefits of investing in health and development interventions far outweigh the costs. Up to **UAH 163 billion** could be generated between 2023 and 2050 following investments into these interventions with a return on investment of up to **9.1.** The cost of inaction could be as high as UAH 128 billion in the fast scale-up scenario.
- Scaling up health and development interventions also has considerable **non-economic benefits** through **child deaths averted and stunting cases averted**. The study finds the loss of **1.1 million disability adjusted life years** (DALYs) could be averted by 2050.
- Investments in some interventions are **more beneficial** than others, such as exclusive breastfeeding and childhood vaccinations.
- In Ukraine, a home visiting programme is an important service for **delivering these interventions**, particularly in the context of the war when travel is sometimes restricted. The benefits of longer appointments are significant.
- Expanding the home visiting programme could ensure that more families across Ukraine have easy **access to health-care interventions** and a **support network** to call if needed.

Table 4. Economic Benefits, Costs, Benefit-Cost Ratio, and Cost of Inaction, in UAH Billions, Discounted by 5%

	Fast	Medium	Slow
Total Costs	16	12	9
Total Benefits	144	107	77
Benefit-Cost Ratio	**9.1**	**9.1**	**8.9**
Cost of Inaction	**128**	**95**	**68**

Social Protection and Child Protection

Table 5. Social Protection and Child Protection Package

Intervention	Baseline	Target
Reducing rates of institutional care	1.08%	0.00%
Universal Birth Grant	7.80%	20%
Cash transfers for children under six with disabilities	20%	100%
Cash transfers for children under six living in large families	57%	100%
Cash transfers for children under six without parental support	20%	100%
Paid maternity leave	126 days	180 days
Paid paternity leave	0 days	14 days
Parenting support programmes	N/A	N/A

Key findings

- Scaling up the coverage of cash transfer programmes could accrue monetary benefits of over **UAH 800 billion** between 2023 and 2050, in the fast scale-up scenario, with a return on investment of **2.3 times**. The cost of inaction of not investing is **over UAH 450 billion**. This investment will also have **positive impacts on education and health outcomes**. During the war, cash transfers have been helping families purchase essential items.
- Increasing paid parental leave allowance will **increase the number of women entering the labour market**, while also **reducing childcare costs** in the first six months. This investment will ensure that primary caregivers, mainly women, have the childcare support needed after the birth of a child.
- Care reform, including deinstitutionalisation, could produce monetary gains of over **UAH 400 billion** by 2050 in the fast scale-up scenario. The cost of inaction is over **UAH 360 billion**. Family-based care improves a **child's emotional, social, and cognitive development, as well as health and education outcomes**. There would also be significant cost savings, due to its current expense, from reducing institutional care. Overall, care reform **will support Ukraine in its accession** into the European Union.
- Parenting programmes can improve a range of ECD outcomes including **language development, cognitive ability, and socio-emotional development**. They also provide additional support for parents, such as **mental health support**. This additional support is very important during and after the war.

Cash Transfers

Table 6. Economic Benefits, Costs, Benefit-Cost Ratios, and Cost of Inaction for the Three Scale-Up Scenarios, in UAH Billions, Discounted by 5%

	Fast	Medium	Slow
Total Costs	357	302	228
Total Benefits	808	609	478
Benefit-Cost Ratio	**2.3**	**2.0**	**2.1**
Cost of Inaction	**451**	**307**	**250**

Parental Leave

Table 7. Economic Benefits, Costs, Benefit-Cost Ratios, and Cost of Inaction for the Three Scale-Up Scenarios, in UAH Billions, Discounted by 5%

	Scale-Up Scenario
Total Costs	7
Total Benefits	14
Benefit-Cost Ratio	**2.0**
Cost of Inaction	**7**

Care Reform and Deinstitutionalisation

Table 8. Economic Benefits, Costs, Benefit-Cost Ratios, and Cost of Inaction for the Three Scale-Up Scenarios, in UAH Billions, Discounted by 5%

	Fast	Medium	Slow
Total Costs	53	127	204
Total Benefits	423	332	241
Benefit-Cost Ratio	**7.9**	**2.6**	**1.2**
Cost of Inaction	**369**	**204**	**37**

Water, Sanitation, and Hygiene

Water, sanitation, and hygiene (WASH) services are a critical input into the enabling environment for ECD. The benefits of WASH coverage are felt across the population but especially by young children. These services are particularly linked to lowering preventable mortality and morbidity (caused, for example, by diarrhoea), and they form a critical part of the enabling environment for positive outcomes in early childhood. This study models the scale up of two WASH interventions. Unfortunately, due to data limitations, it was not possible to determine the benefit-cost ratio for WASH interventions; the cost of inaction and the monetary benefits remain, however, significant.

Table 6. WASH Interventions

Intervention	Baseline	Target
Basic sanitation	98%	100%
Safely managed water	70%	100%

Key findings

- Investing in WASH interventions could generate significant economic gains for Ukraine. In the fast scale-up scenario, the economic benefits could reach nearly **UAH 245 billion** between 2023 and 2050. Meanwhile, the cost of inaction is expected to reach **UAH 32 billion**.
- As well as economic benefits, investments in WASH will have impacts on health and nutrition outcomes. For example, over **55,000 stunting cases could be averted** between 2023-2050 in the fast scale-up scenario, and **30,000 i**n the slow scale-up scenario.
- Investments into WASH interventions are likely to generate **efficiency savings across the health sector**. In the fast scale-up scenario, it is estimated that **UAH 143 million** would be saved by 2050 due to the long-term health benefits of a strong WASH system.
- The benefits of good WASH extend far beyond what was able to be modelled in this Investment Case. The benefits are also likely to be **substantial across society**, rather than just impacting children under six.
- These benefits are paramount for Ukraine given the ongoing effects of the war, which has impacted access to WASH facilities. Not only will investments in WASH have long-term benefits, but they are also likely to make Ukraine a **more stable and prosperous** country, encouraging people to return.

Table 10. Economic Benefits, Costs, Benefit-Cost Ratios, and Cost of Inaction for the Three Scale-Up Scenarios, in UAH Billions, Discounted by 5%

	Fast	Medium	Slow
Total Costs	212	166	121
Total Benefits	245	184	130
Cost of Inaction	**32**	**18**	**9**

Conclusions and Recommendations

Beyond the economic, there are further urgent reasons why Ukraine should invest more in children now:

- Providing today's children with access to quality ECD services will **equip Ukraine with the dynamic future workforce that will drive tomorrow's prosperous and competitive economy**, which is critical given Ukraine's aging population.
- Quality ECD services and employment opportunities would be key quality of life and economic pull factors that attract young families back to Ukraine.
- **National development** will be at the heart of new jobs in ECD. These roles will create opportunities not just for **youth employment** but also for **young adults to participate meaningfully in Ukraine's recovery**.
- **Women's re-entry into the workforce** will be supported by the expansion of quality ECEC services. More equitable sharing of paid and unpaid care work between men and women **will support gender equality and women's empowerment**.
- **Ukraine's accession into the EU** will be supported by the continued development of social services and a focus on integrated ECD. Childcare reform and increasing family-based care instead of institutional care are a particular priority for the EU.

Overall Recommendations

1. The Government of Ukraine should develop an overarching ECD policy and strategy.
2. The Government of Ukraine should seek to scale-up interventions to cover all children under the age of six within the shortest time frames feasible.
3. The Government of Ukraine, with the support of development partners, should complete a detailed fiscal space analysis and financing plan to model the scale-ups.
4. Line ministries, with the support of the Ministry of Finance, should regularly engage in budgeting and expenditure tracking activities for ECD.
5. The State Statistics Bureau of Ukraine and line ministries are encouraged to work together to improve data and information systems across sectors relevant to ECD.
6. The relationship between national and local level governments in the planning, financing, and delivery of ECD services could be strengthened.
7. Policy and programme developers are advised to enhance their focus on principles of equity and inclusivity.

Specific Early Childhood Education and Care Recommendations

1. The Ministry of Education and Science is encouraged to develop and ECEC policy and accompanying strategy to scale-up quality services.
2. The Ministry of Education and Science should consider expanding alternative ECEC service delivery modalities.
3. The Ministry of Education and Science should explore whether innovative or alternative financing mechanisms could be used to support a scale-up of ECEC services.

4. The Ministry of Education and Science is recommended to review, and quality assure frameworks for ECEC, including minimum quality standards, processes for licensing, inspections, and monitoring, as well as indicators to measure services and outcomes.
5. The Government of Ukraine is encouraged to improve the inclusivity of ECEC policies and programmes.
6. The Ministry of Education and Science is encouraged to continue to adopt a multi-sectoral, holistic approach to ECD.

Specific Health and Development Recommendations

1. The Government of Ukraine should consider developing a costed plan or strategy that outlines activities required to reach full coverage for maternal, newborn, and child health (MNCH) interventions.
2. The Ministry of Health should work closely with the Ministry of Finance to identify financing strategies to fund these plans.
3. The Ministry of Health should prioritise the expansion of the home visiting programme, as an important platform for delivery for critical interventions in the first 1,000 days.
4. The Ministry of Health and its partners are strongly encouraged to scale-up access to quality, age-appropriate mental health services.
5. The Government of Ukraine should investigate ways to strengthen detection, referral, and treatment pathways for children with disabilities and developmental delays.

Specific Social Protection and Child Protection Recommendations

1. The Government of Ukraine should consider developing a costed plan under the Better Care programme that outlines a holistic approach to social protection and child protection. This plan would aim to provide all children with a holistic set of early childhood interventions and cash support, in order to reduce the likelihood of a child needing institutional care.
2. The Government of Ukraine should consider expanding and streamlining cash transfer programmes.
3. The Government of Ukraine should prioritise deinstitutionalisation by expanding the Better Care programme.
4. The Government of Ukraine should continue to utilise existing infrastructure to scale-up social protection and child protection services.
5. The Ministry of Social Policy should consider expanding early childhood interventions beyond parenting programmes.
6. The Government of Ukraine must also prioritise the wider social protection and child protection systems.
7. The Ministry of Social Policy, in collaboration with the Ministry of Health, should look to expand parental leave for mothers and fathers.

Specific Water, Sanitation, and Hygiene Recommendations

1. The Government of Ukraine is encouraged to closely assess damage to WASH infrastructure, and prioritise reconstruction and restoration efforts.
2. The Ministry of Infrastructure should consider collaborating closely with other sectors working with young children to improve WASH habits.
3. The Government of Ukraine should develop a strategy to support WASH service providers who have been impacted by damage related to the war.

Fiscal Space Analysis

Ukraine faces severe macro-fiscal challenges due to the full-scale war, which has resulted in negative economic growth, escalated poverty, and destruction of capital. Ukraine's GDP contracted in 2020 due to the COVID-19 pandemic. The war then caused a substantial GDP contraction of 30.3% in 2022, unemployment rate escalation to 24%, and a regression in poverty reduction gains.

Social sector spending has been maintained at a steady pace, with projections indicating increased expenditures up to UAH 978 billion by 2030. Defence spending, however, currently dominates the budget due to the war.

Resource needs and financing gap

This Investment Case provides high-level estimates of the costs of scaling up ECD interventions at different speeds.

Cost Estimates	2023	2024	2025	2026	2027	2028	2029	2030
Baseline	105.0	116.8	126.2	132.2	135.2	136.8	138.7	140.8
Slow	105.0	117.8	128.0	134.9	138.7	141.3	144.1	147.5
Medium	105.0	118.1	128.8	136.0	140.3	143.3	146.7	150.7
Fast	105.0	119.5	131.7	140.4	146.3	151.0	156.2	162.4

These resource needs were compared with projections of social sector expenditure (based on current volumes). The result shows a significant financing gap under all coverage scale-up scenarios. The Fiscal Space Analysis assess the fiscal space using both projections of the current macroeconomic context and policy stance, as well as an economic downside scenario, accounting for significant shock to economic output. Without undertaking new financing measures (such as those outlined below), **the annual financing gap would reach UAH 21.6 billion by 2030** under the fast scale-up scenario, or **UAH 6.7 billion** by 2030 under the slow scale-up scenario.

Financing Options for Closing the Gap

The Fiscal Space Analysis identifies four options for closing the financing gap. Taken together, these **would reduce the financing gap by 83%, under the fast scale-up scenario**, to UAH 3.4 billion. The combined measures would **completely eliminate the financing gap under the slow scale-up scenario**.

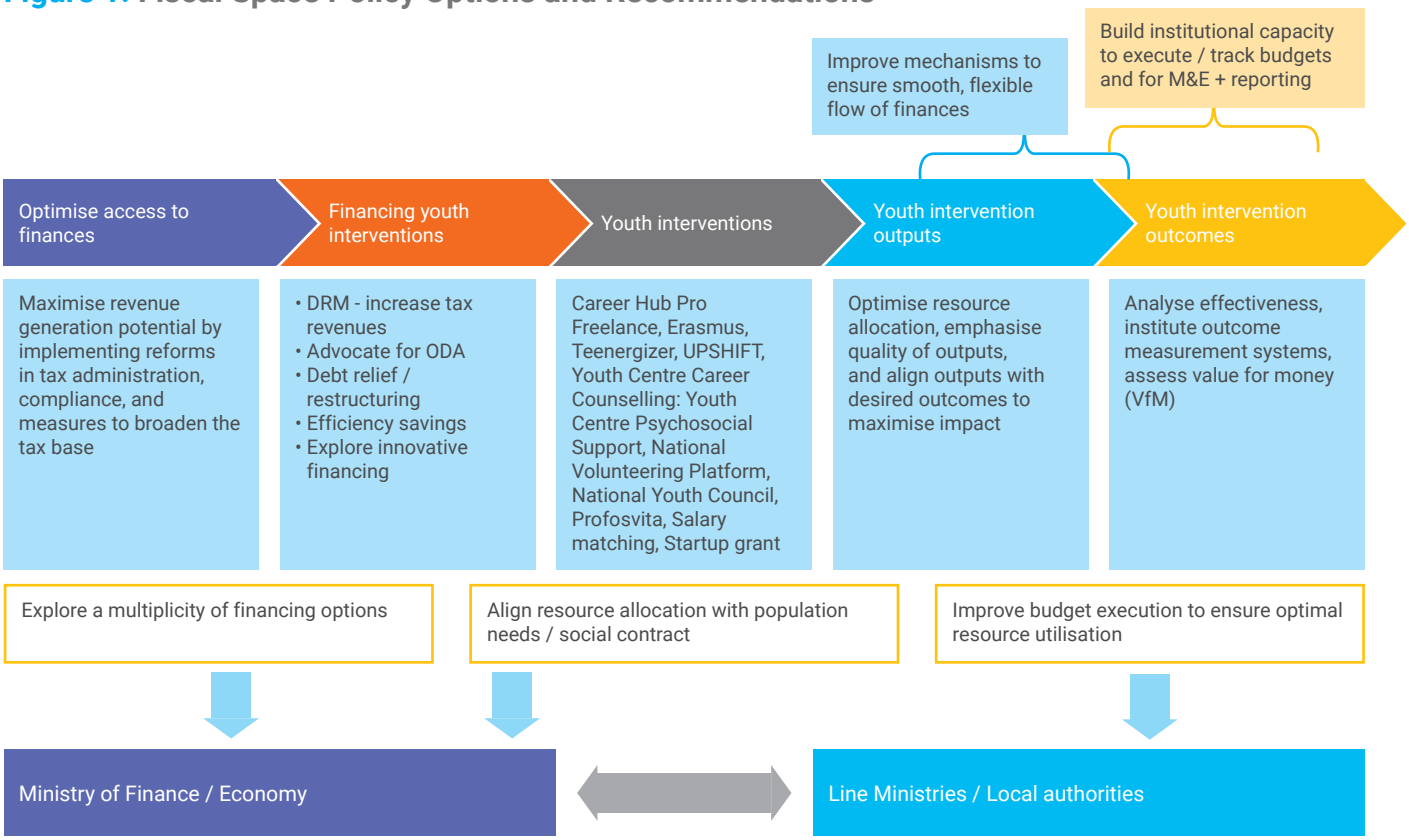
The financing options are:

1. **Domestic Revenue Mobilisation:** This is the most sustainable means of creating fiscal space for financing the national budget. Through tax and public financial management reforms, Ukraine could increase its tax-GDP ratio, potentially creating additional revenue for social spending. The reforms modelled would reduce the financing gap for ECD interventions by about **UAH 5 billion** per year to 2030.
2. **Official Development Assistance (ODA):** ODA is expected to continue, and it is likely the social sectors will remain a priority, at least in the short-term. ODA is estimated to close the financing gap for ECD interventions by, on average, approximately **UAH 4.8 billion annually** between 2023 and 2030.
3. **Debt Relief and Restructuring:** Savings from debt relief could be redirected to priority social spending. These funds would result in an estimated reduction of the financing gap for ECD interventions of around **UAH 7.5 billion**, annually, between 2023 and 2030 (while depleting resources of up to UAH 2.6 billion, annually, for ECD interventions under a downside scenario).
4. **Efficiency Savings:** It is recommended that Ukraine focus efficiency efforts in the education and health sectors on input efficiency. Improving input efficiency could reduce the financing gap for ECD interventions by about **UAH 1.3 billion** annually on average between 2023 and 2030 (approximately UAH 170 million under the downside scenario).

Policy Implications and Recommendations

- Prioritise negotiations with international partners to secure predictable ODA commitments in the medium-term with clear allocations for social sectors, including ECD programmes.
- Optimise domestic revenue mobilisation as the most sustainable source of funding for ECD.
- Control expenditures and implement efficiency measures to avoid accruing further debt.
- Streamline administrative processes, reduce duplication of services, and improve targeting.

Figure 1. Fiscal Space Policy Options and Recommendations



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1

Introduction

Extensive research shows that the early years of a child's life really matter. Every second of early childhood, millions of neural connections are made. By the age of two, the brain is 80% of its adult size, and by the age of five, brain development hits 90%.[11] During this stage, children will undergo crucial development, including acquiring physical and motor abilities, expanding cognitive capabilities, and nurturing psycho-emotional behaviours and individual personalities, along with developing social skills. This period deserves particular attention from all those concerned with promoting child rights and advancing human development.

Interventions in ECD can support development and increase the likelihood of long-term wellbeing, productivity, gender equality, and prosperity (both at an individual and a societal level). For young children to reach their full potential, they need a range of interconnected and diverse sets of interventions to support their development. The Nurturing Care Framework is an internationally recognised framework conceptualising an approach to ECD that promotes interventions aimed at maximising the human potential in young children (Figure 2). The Framework posits that to maximise early childhood development, young children require quality, nurturing care and interventions across five components: good health, adequate nutrition, safety and security, early learning opportunities, and responsive caregiving. Longitudinal studies from a wide range of case studies show that children who participate in quality early childhood programmes experience multiple benefits, including improved test scores, higher graduation rates, decreased crime and delinquency rates, and improved long-term income. When these benefits are monetised, the returns on investments can be enormous; a much-cited estimate suggests investments in nurturing care interventions can return up to 13 times the initial amount invested.[12]

[11] Gao, W., et al. (2018). Imagining Structural and Functional Brain Development in Early Childhood, accessed: 26 March 2024. Available here: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5987539/#:~:text=Overall%20growth%20of%20the%20brain,80%25%20of%20adult%20size3.

[12] J Heckman (n.d.). Invest in Early Childhood Development: Reduce Deficits, Strengthen the Economy, accessed: 26 March 2024. Available here: https://heckmanequation.org/resource/invest-in-early-childhood-development-reduce-deficits-strengthen-the-economy/.

Figure 2. The Nurturing Care Framework: Interventions aimed at maximizing the human potential in young children

Integrated ECD services can lead to better outcomes for children and their families. An integrated approach to ECD refers to programmes and policies that bring together services from multiple areas, providing a unified approach.[13] An integrated approach to ECD forms a cohesive system that can be easily accessed by families. A fragmentation of services may result in a lack of consistency and continuity for children and families, sometimes leading to their receiving conflicting advice or information.[14] Not only are integrated services more accessible, but they can be more aligned and better suited to children's and families' needs. Integrated ECD policies and programmes can also help clearly define the roles and responsibilities of different sectors, reducing the likelihood of overlap and ensuring all services are provided.[15]

In Ukraine, ECD is vital and will play an invaluable role in recovery from the war. Investing in ECD will help create a society that people want to return to; this is particularly important given the high number of families (especially women) with young children who have left the country.[16] This desire to return will occur in part due to a rebuilding of the social contract. If institutions are available to care for people, then Ukrainians will have more faith in the system. Ensuring that comprehensive, integrated ECD services exist will encourage Ukrainian families to return as they will have faith in the comprehensive range of services being provided for their children. Investing in ECD now will ensure that the next generation of Ukrainians are able to flourish as working-age adults, leading to the economic growth necessary for Ukraine's sustained recovery.

[13] Corter, C. (2021). Integrated Early Childhood Development Services, accessed: 26 March 2024. Available here: https://www.child-encyclopedia.com/pdf/complet/integrated-early-childhood-development-services.
[14] Ibid.
[15] The World Bank (2019). Integrated Models for Early Childhood Development, accessed: 26 March 2024. Available here: https://thedocs.worldbank.org/en/doc/674861555132593197-0080022019/related/11Integrated0E120191For0translation.pdf.
[16] UNHCR (2024). Ukraine Refugee Situation, accessed: 22 February 2024. Available here: https://data.unhcr.org/en/situations/ukraine.

1.1 The Study

Situated in the context above, the overall objective of this project is to provide evidence justifying the importance of investing in a holistic set of ECD interventions in Ukraine, thus boosting financial allocations to the sectors that deliver ECD. The aim is also to support government decision-makers and partners in expanding and evolving ECD programmes (with a focus on education, health, and social protection). This work will be achieved by developing strong, context-specific evidence on the importance of investing in ECD, a clear analysis of the financial benefits of doing so, and the creation of a practical, sustainable roadmap for implementing the recommended interventions and strategies in Ukraine.

Following discussions with UNICEF during the inception mission to Ukraine, the decision was made to focus on education, health, social protection, and WASH. Nutrition will be an important sub-sector within health, while child protection will be an important part of social protection.

The specific objectives of this project are as follows:

1. **Developing a persuasive case for investing in ECD interventions**, with a specific focus on a package of interventions that can aid Ukraine in its recovery from the war, developing a prosperous, thriving society that people want to return to, notably young women.
2. **Creating a roadmap** to aid in implementing and/or scaling up the recommended interventions with a focus on a practical and sustainable route forward.

This report is designed as a strong piece of empirical evidence and a compelling advocacy tool. Broadly, in the first stage, a cost benefit analysis (CBA) will illustrate why investing in ECD is so imperative. This analysis not only illustrates the significant rates of return that are generated from scaling up ECD interventions, but it also explores the comprehensive non-monetary benefits that these interventions can produce. The second stage explores how financing can be scaled up. This stage examines the current available fiscal space and the costs required to enact the suggested scale ups. It then explores options for increasing the financing of ECD so the benefits from the CBA can be realised. Financing solutions are then proposed and ways to overcome possible bottlenecks. Finally, the addition of the roadmap will take the analysis one step further by providing practical, realistic, and actionable solutions as to how ECD interventions can be scaled up. This roadmap will deliver a framework for scale up that be used by the government and development partners. This study is designed to motivate the government (including at local levels) to leverage funding (both domestic and external) for the scale up of integrated, high-quality ECD services as a pivotal strategy in recovery efforts.

1.1.1 Research Questions

Based on the objectives of the project, several research questions were designed that this report seeks to answer. These are as follows:

- What investments are needed to ensure that young children in Ukraine have the best start in life?
- To what extent do investments in ECD offer an excellent rate of return in Ukraine and which interventions should be prioritised?
- What are the expected benefits of investment?
- What is the predicted rate of return across different time horizons?
- What are the expected costs per intervention?
- What is the expected cost of inaction for not making sufficient investments in ECD?
- What are the next steps to mobilise finances, human resources, and infrastructure?

1.1.2 Limitations

There are some limitations to this study, which are detailed below:

1. Where possible, recent data from Ukraine has been used to model interventions. However, where data is not available or could not be accessed, regional assumptions have been used instead. Ukraine-specific data typically predates the war.
2. It was not possible to model the monetary benefits of all interventions selected for this study due to a lack of data on the long-term impacts of the interventions on young children. Where it has not been possible to model interventions, a desk-based review of evidence on the benefits of these interventions was conducted.
3. Investment case costing is high-level and should not be used in place of detailed costing, which is a different exercise. Rather, it provides an estimation of the costs and an estimation of the benefits to produce advocacy for scale-up.
4. National-level financing data has been used for the fiscal space analysis, although examples of local-level budgets have been drawn out where possible.

2

Context

2.1 Why invest in early childhood development?

Investments in early childhood have the greatest rate of return of any human capital intervention.[17] There is extensive research demonstrating that the early years of a child's life really matter. This is because early childhood is a developmental period in which children are more likely to be influenced by their environment and their experiences than in later childhood. The experiences gained during early childhood have a significant impact on the long-term trajectory of a child's life. Moreover, the benefits of investing in younger children will be experienced over a larger number of years than investing in older children and adults.

Early childhood provides an important window of opportunity to define the course of a child's development and form a foundation for their future. Spanning from conception to the age of six, children in their early years undergo rapid development, acquiring physical, cognitive, motor, psycho-emotional, and social skills. Beyond the moral importance of investing in ECD as a human right, investing in ECD is shown to be among the best investments a country can make in its future, yielding huge socio-economic returns not only for the children but for society.[18] ECD is, however, globally underfunded, despite the recognition of the value of ECD.

[17] J. Heckman (2006). Skill Formation and the Economics of Investing in Disadvantaged Children, Science, 312(5782), accessed: 24th March 2024. Available here: https://heckmanequation.org/resource/the-heckman-curve/

[18] Heckman Equation (2021). The Heckman Curve, accessed 19 August 2021. Available here: https://heckmanequation.org/resource/the-heckman-curve/

Evidence shows that it is possible to predict by the age of six which children are likely to succeed in life. For example, recent global research suggests that 40% of children with pre-primary education experience display minimum literacy skills by Grade 2, compared to only 18% of children without any pre-primary education experience. Similarly, 63% of Grade 2 pupils with pre-primary education experience[19] display minimum competencies in mathematics, compared to 49% of pupils without pre-primary education experience.[20]

Meaningful differences in outcomes between advantaged and disadvantaged children are apparent as early as nine months.[21] Children living in disadvantaged settings are naturally at a greater risk of exposure to risk-factors; such early exposure damages a child's brain architecture and has lifelong implications. This factors include toxic stress, inadequate nutrition (particularly, low rates of breastfeeding and rising obesity), insecure housing arrangements, and a lack of parental stimulation. The ongoing war in Ukraine has exposed more children to these risks and has increased the severity. These factors have also been shown to lower future academic achievement and contribute to poorer outcomes across the course of life (including an increased risk of degenerative diseases, such as diabetes, and lowered lifetime earning potentials), thus entrenching a cycle of multi-generational poverty, disadvantage, and inequity.[22]

High-quality, well-designed ECD interventions can overcome pre-existing inequities and reduce multi-dimensional, and multi-generational poverty. A seminal longitudinal tracer study carried out in Jamaica, for example, found that children who were part of an ECD study programme (which worked with growth-stunted children between the ages of 9 and 24 months in a two-year randomised controlled trial) caught up with their non-stunted peers and then earned 25% more as adults than the disadvantaged children in the control group (who received no intervention).[23] Furthermore, investments in ECD are comparatively lower cost; investing in children at this early stage saves money in the long-run. Not only do these investments generate high rates of return, but they can also reduce the need for more substantial interventions later in life.[24] For example, a healthy childhood can reduce the need for health interventions in adults, likely to be more substantial and costly.[25]

Investment in ECD enables progress towards the Sustainable Development Goals (SDGs). Within the framework of the SDGs, achieving strong ECD is seen as a prerequisite, particularly in the fight against poverty, inequality, and social exclusion and in the promotion of peace and security. SDG 4, Target 4.2, calls for all girls and boys to have access to quality ECD, care, and pre-primary education.[26] Ukraine's coverage of five-year-old children in preschool stayed nearly the same in the period between 2015 to 2019 at 70.5%; but began showing improvements thereafter, increasing to 74.8% in 2020.[27] There were significant urban–rural disparities, however, as this increase was driven by improvements in urban coverage, which rose from 77% in 2019 to 85% in 2020; whereas, coverage in rural areas dropped from 57.4% to 54.3% over the same period. Developing ECD institutions and services will therefore move Ukraine towards Target 4.2; although there must be focus on quality, and particularly on coverage for rural areas. The importance of meeting the SDGs cannot be understated, as commitment to them creates a global alliance that ensures no one is left behind.[28] This will also support the development of a strong social contract, ensuring that people have faith in the institutions and services that care for them.

Investing in these periods of early childhood also makes clear economic sense, returning up to 17 times the amount invested. The size of the benefit-cost ratio (BCR) is dependent on numerous factors, such as the baseline coverage of an intervention, the availability of national or regional data on the impacts of the intervention, and the specific package of interventions modelled. Early childhood education and certain health interventions have larger monetisable benefits than other interventions, such as cash transfer programmes.[29] The early years are a critical window where opportunities

[19] UNICEF (2019). A World Ready to Learn: Global Report on Pre-Primary Education, accessed 1st April 2024. Available here: https://www.unicef.org/media/57926/file/A-world-ready-to-learn-advocacy-brief-2019.pdf.

[20] Ibid.

[21] B. Morgan (2013). Biological Embedding of Early Childhood Adversity: Toxic Stress and the Vicious Cycle of Poverty in South Africa, Ilifa Labantwana: Research and Policy Brief Series, accessed: 14th March 2024. Available here: https://ilifalabantwana.co.za/wp-content/uploads/2017/06/Toxic-stress-and-the-vicious-cycle-of-poverty-in-South-Africa.pdf

[22] Ibid.

[23] P. Gertler et al. (2014). Labor Market Returns to an Early Stimulation Intervention in Jamaica, Science, 344:6187, p. 998-1001.

[24] J Heckman (n.d.). 4 Big Benefits of Investing in Early Childhood Development, accessed: 26 March 2024. Available here: https://heckmanequation.org/resource/4-big-benefits-of-investing-in-early-childhood-development/.

[25] Ibid.

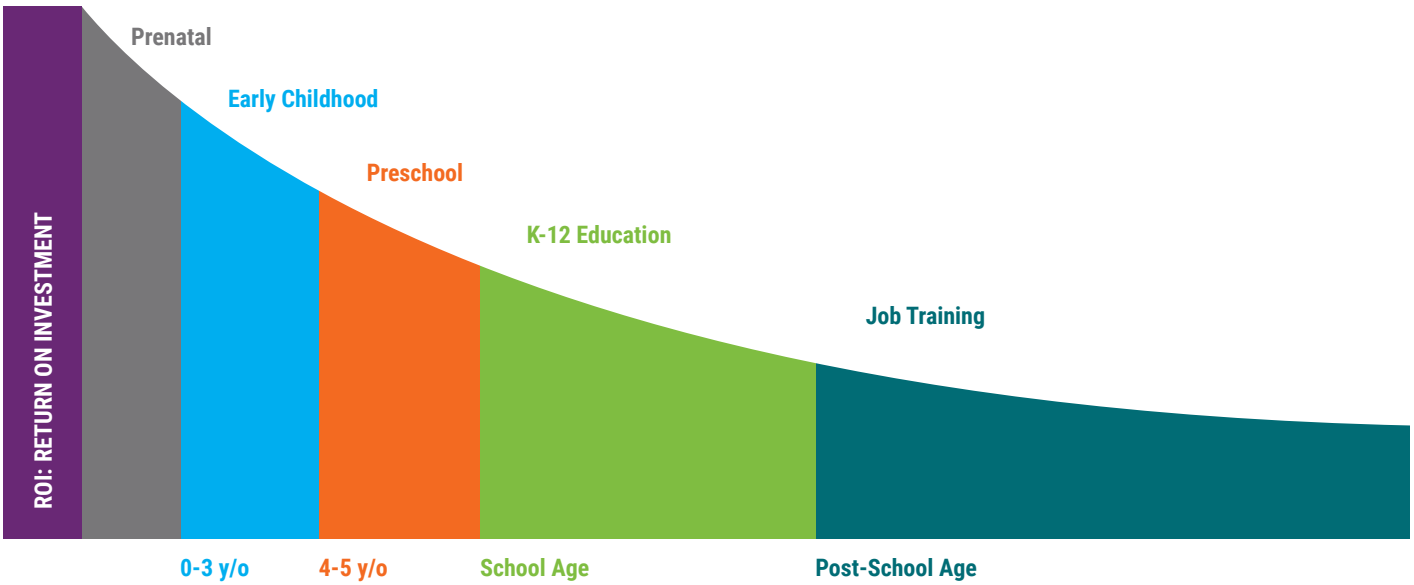
[26] SDG 4 Education 2030. Sustainable Development Goal 4 (SDG 4), accessed: 20 April 2024. Available here: https://www.sdg4education2030.org/the-goal 27 Sustainable Development Goals Ukraine 2021 Monitoring Report. https://ukraine.un.org/en/sdgs/4

[28] The World Health organization (n.d.). Sustainable Development Goals, accessed: 26 March 2024. https://www.who.int/europe/about-us/our-work/sustainable-development-goals#:~:text=They%20are%20a%20call%20to,no%20one%20is%20left%20behind.

[29] Hansen, K. (2016). Early Childhood Development: A Smart Investment for Life, accessed: 26 March 2024. https://blogs.worldbank.org/en/education/early-childhood-development-smart-investment-life#:~:text=Evidence%20from%20both%20developed%20and,preschool%20programs%20targeting%20vulnerable%20groups.

for human development are greatest. A vast body of evidence has emerged in recent years arguing that investments in early childhood have the greatest return of any human capital intervention (Figure 4). Longitudinal studies from a wide range of case studies show that children who participate in quality early childhood programmes experience multiple benefits, including improved test scores, graduation rates, decreased crime and delinquency rates, and improved long-term income.[30] When these benefits are monetised, the returns on investments can be enormous, with a much cited estimate suggesting investments in nurturing care interventions can return up to 17 times the initial amount invested.[31] An investment in early childhood thus lays a strong foundation for development, gender equality, and women's empowerment; increases the effectiveness of the education and health systems; improves economic productivity; and, contributes to more equitable societies.

Figure 3. The Heckman Curve – Return on Investment: Economic Impact of Investing in Early Childhood[32]



2.2 Why is Early Childhood Development Important in Ukraine?

Over recent decades, the population in Ukraine has begun to age and decline. In 2000, just under 4.35% of the population was under the age of four; in 2022, this percentage dropped to 3.86%.[33] Comparatively, the population over 65 is growing rapidly, from 14% of the total population in 2000 to just over 20% in 2022.[34]

These demographic trends have been exacerbated by the on-going war. Ukraine's fertility rate has dropped from 1.44 in 2010 to 0.7 in 2023, significantly below the replacement level of 2.1 and the global average of 2.3.[35] Further, by late 2023, around 3.7 million people were estimated to be displaced internally across Ukraine, while about 5.9 million refugees remained outside the country.[36] Alongside an already declining fertility rate, displacement from the war is likely to put pressure on Ukraine's opportunities for economic growth and will increase dependency ratios, particularly as the population ages.

[30] P. Engle et al. (2011). Strategies for Reducing Inequalities and Improving Developmental Outcomes for Young Children in Low-Income and Middle-Income Countries, Lancet, 378:9799, 1339-53.
[31] Ibid.
[32] Ibid.
[33] United Nations, Department of Economic and Social Affairs, Population Division (2022). World Population Prospects: The 2022 Revision. Accessed: 14 August 2023. https://population.un.org/dataportal/data/indicators/71/locations/804/start/2000/end/2035/table/pivotbylocation
[34] United Nations, Department of Economic and Social Affairs, Population Division (2022). World Population Prospects: The 2022 Revision. Accessed: 14 August 2023. https://population.un.org/dataportal/data/indicators/71/locations/804/start/2000/end/2035/table/pivotbylocation
[35] United Nations, Department of Economic and Social Affairs, Population Division. (2022). World Population Prospects: The 2022 Revision. Accessed: 14 August 2023. https://population.un.org/dataportal/data/indicators/71/locations/804/start/2000/end/2035/table/pivotbylocation
[36] IOM (2023). Ukraine — Internal Displacement Report — General Population Survey Round 14 (September – October 2023). https://reporting.unhcr.org/operational/situations/ukraine-situation?page=0%2C%2C%2C1

The war's repercussions on the education system will have an adverse impact on Ukraine's human capital potential. The World Bank estimated that Ukraine's Harmonised Learning Outcome score may have dropped from a pre-war 481 points to 420 by 2023.[37] This drop is expected to lead to future income losses estimated to be in the trillions of dollars.[38] The latest assessment (third rapid damage and needs assessment) finds that, since February 2022, the estimated accumulation of learning losses amounts to USD 5.5 billion, a figure that will likely rise over the course of the following years.[39] Prior to the full-scale war, 28% of primary-age children suffered from learning poverty, a figure that has likely worsened due to the war's impact on educational infrastructure and learning outcomes. The war has led to the significant displacement of pupils and educators, the destruction of educational infrastructure, and considerable learning losses. Impacts on preschool children are unknown due to lack of data, but these children are expected to face considerable impacts to their social and emotional development due to the lack of quality remote education options.[40] Given the critical role education plays as a driver of economic growth, Ukraine's learning losses are likely to diminish human capital and lower productivity, slowing national economic development as a result of the war.[41]

These demographic shifts and war-driven learning losses underscore the critical need for investments in ECD in Ukraine. With an aging population and declining fertility rates exacerbated by displacement, investing in the early years is essential to mitigate mounting dependency ratios and lost human capital potential. High-quality, integrated ECD interventions can counteract the severe learning losses and risks children now face from war-related stressors. Moreover, the availability of quality ECD services will be a point of attraction to current and prospective parents of young children, thereby promoting the return of refugee women and children to Ukraine.

The most disadvantaged and vulnerable children stand to gain most from investment in ECD. Significant evidence from across geographical and socio-political contexts indicates that ECD interventions are particularly effective for the most disadvantaged and vulnerable children; as these interventions mitigate the negative impacts of the increased risks the children and their families face in the early years.[42] The benefits of ECD for disadvantaged children include both short-term benefits, such as improvements in learning outcomes, and life-long improvements in health, education, and earning potential.[43] Through investment in ECD, Ukraine can help get displaced and war-affected children back on track developmentally and build the human capital necessary for future economic growth.

The benefits of ECD investments will compound over time as supported children experience improved learning, health, and future earnings. Given the high social and economic returns of investing in early childhood, ECD is one of the most effective tools that Ukraine can use in its rebuilding efforts and EU accession aspirations.

2.2.1 Early Childhood Education and Care

Ukraine made progress before 2022 in expanding access to and improving the quality of early childhood education services, although significant access gaps remain. In 2018, the overall enrolment in preschool for children five years of age was 69.1% overall for Ukraine, with 84.5% in urban settlements and 57.8% in rural areas.[44] Ukraine has made progress since then, with the overall enrolment of five year olds rising to 73.4% in 2021.[45] However, this figure declined to 65.6% in 2022.[46] For comparison, the 2022 OECD average for enrolment of 3-5 year olds was 87%; enrolment in nearby Romania was 78%, and Poland and Finland stood at 88% each.[47] To improve the quality of ECEC, standards were introduced in 2017 around workforce qualifications, training, and class sizes.[48,49] All children aged 1-7 are entitled to free pre-primary

[37] World Bank (2023). Rapid Damage and Needs Assessment February 2022 – February 2023. https://ukraine.un.org/sites/default/files/2023-03/P180174 0d1177f03c0ab180057556615497.pdf

[38] Ibid

[39] The World Bank (2024). Ukraine: Third Rapid Damage and Needs Assessment, accessed: 16.08.2024. Available here: https://ukraine.un.org/sites/default/files/2024-02/UA%20RDNA3%20report%20EN.pdf. These assessments estimate the cost of the war across different sectors in Ukraine. Since 2022, three different assessments have been conducted.

[40] Anna Valero (2021). Education and Economic Growth, Discussion Paper no. 1764, Centre for Economic Performance. Accessed at: https://files.eric.ed.gov/fulltext/ED614082.pdf

[41] Ibid.

[42] UNICEF (2023) Add Today Multiply Tomorrow: Building an Investment Case for Early Childhood Education.

[43] Ibid.

[44] Peeters, J. (2018). Improving the Quality of ECEC Services in Ukraine, VBJK. Gent.

[45] Derzhstat (2023). Data Bank – Ukraine, accessed: 11 April 2024. https://stat.gov.ua/en/explorer?urn=SSSU%3ADF_EDUCATIONAL_INSTITUTIONS%2832.0.0%29&filter=EDIG01_02.%2A.%2A.%2A.%2A.%2A.%2A.%2A.%2A

[46] Ibid.

[47] OECD Family Database - PF3.2: Enrolment in Childcare and Preschool. https://www.oecd.org/els/family/database.htm/

[48] The Law of Ukraine "On Education", dated 5 September 2017, No. 2145-VIII. https://www.venice.coe.int/webforms/documents/default.aspx?pdffile=CDL-REF(2017)047-e

[49] Peters, J. (2018). Improving the Quality of ECEC Services in Ukraine, VBJK. Gent.

education, whether home- or centre-based, though parents pay for feeding, depending on local municipal laws. Ukraine's funding for preschool education saw a steady increase initially starting in 2011, going from 3.2% of total education expenditure to 7.3% in 2016.[50] However, the funding stalled and decreased thereafter, due to which capital expenditure for preschool construction also declined.[51] This decrease resulted in significant overcrowding in kindergartens, which were 112% filled on average in 2017; some areas, such as Lviv and Volyn, were over 145% filled.[52] Expenditure on preschool education overall has increased since the full-scale war began, rising from UAH 40.7 billion in 2022 to UAH 45.3 billion in 2023, with UAH 52.6 billion budgeted for 2024.[53]

The war has severely disrupted Ukraine's early childhood education system, exacerbating existing challenges. It has caused large-scale displacement of over 500,000 children of preschool age, along with their families and educators, and caused destruction of preschool and kindergarten facilities. Preschools that have not been damaged but which do not have shelters meeting government standards also remain closed, further restricting access to early education. While specific impacts on preschoolers are unknown, the challenges are expected to be substantial given these factors.

The second rapid damage needs assessment estimates a potential decline in Harmonised Learning Outcome scores from 481 to 420 points.[54] Before the full-scale invasion, Ukraine was falling behind the OECD averages in all three PISA domains, one of the tests used to determine harmonized learning scores, maths, reading, and science.[55] Reading scores in particular were falling behind OECD averages, the gap doubling between 2018 and 2022.[56] Unfortunately, the results of the 2022 PISA survey are incomplete, because data collection could not be completed after the war escalated. However, as suggested by the RDNA2, learning losses have likely been exacerbated by the war, increasing future economic losses and highlighting the acute need for robust ECD interventions. The learning losses due to the war have likely caused learning outcomes to fall to the lowest levels in Europe.[57]

2.2.2 Health and Development

The provision of essential maternal and infant healthcare, nutritious feeding, and positive parenting are critical components of ECD. These interventions can protect children from life-threatening illnesses, support their long-term health, and improve physical, cognitive, and psycho-social development.

In the last decade, Ukraine has made notable progress in reducing child mortality. The infant mortality rate has been on a decline for the last decade. With 7 deaths per 1,000 infants, Ukraine is comparable to regional peers, including Bosnia and Herzegovina (BiH), Moldova, and Poland which record 5, 12, and 4 deaths per 1,000 infants, respectively. Similarly, the under-five mortality rate has declined over the last decade (2010 and 2021) from 12 to 8 deaths per 1,000 live births. The current rate is also comparable to regional peers, with BiH, Moldova, and Poland recording under-five mortality rates at 6, 14, and 4, respectively.[58] Vaccinations, including those intended for booster and immunization, are provided to children free of charge under the National Vaccination Schedule. While there has been progress on health indicators, challenges remain in terms of vaccination coverage, for which Ukraine remains at or below WHO targets for BCG (82% [target: 79%]), DTP3 (80% [target: 79%]), polio 3rd dose (80% [target: 89%]), measles 2nd dose (87% [target: 95%]), and hepatitis B 3rd dose (79% [target: 90%]).[59] As a result, there have been various outbreaks in recent years, such as measles in 2017

[50] Nataliia Nazukova (2019). Investing in Early Childhood Development in the Context of Reforming Educational Funding in Ukraine.
[51] Ibid.
[52] Ibid.
[53] Authors' calculations based on data from the Ministry of Finance of Ukraine (2024), accessed on: 4 April 2024. https://openbudget.gov.ua/national-budget/expenses?class=functional&view=table
[54] The World Bank (2023). Second Ukraine Rapid Damage Needs Assessment, accessed: 16th August 2024. Available here: https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099184503212328877/p1801740d1177f03c0ab180057556615497. Harmonized learning outcomes are produced using a conversion factor to compare international and regional standardized achievement tests. These tests include PISA, TIMSS, PIRLS, SACMEQ, LLECE and PASEC.
[55] OECD (2022). Ukraine, accessed: 16th August 2024. Available here: https://gpseducation.oecd.org/CountryProfile?plotter=h5&primaryCountry=UKR&treshold=5&topic=PI. Survey data is incomplete for this PISA was being collected before the war escalated. Then data collection could not be completed in the regions most affected by the war due to disruption.
[56] Ibid.
[57] World Bank (2022). Education. Impact of the War in Ukraine. https://documents1.worldbank.org/curated/en/099945306202211104/pdf/P1775870809f1d04d0844c0e7042abf0eb5.pdf
[58] UNICEF (2023). ECD Index. https://data.unicef.org/
[59] Ukraine Health Cluster Ukraine (2022). Public Health Situation Analysis (PHSA), accessed: 16th August 2024. Available here: https://healthcluster.who.int/publications/m/item/ukraine-public-health-situation-analysis-(phsa)---short-form.

(affecting approximately 115,000 people) and outbreaks of polio in 2010 and more recently in 2021 (declared closed by WHO in 2023).[60] Expanding access to vaccinations remains a priority for Ukraine, especially in light of the decentralised approach that has been taken in recent years requiring local governments to play a key role in providing services.[61]

While Ukraine is on track to meet its stunting target, as of 2022 22.9% of children under the age of 5 were still affected, which is much higher than the European regional average of 4.5%.[62] The progress on the wasting target cannot be assessed adequately due to insufficient data, but 8.2% of children under 5 years old are most likely affected based on the latest prevalence data. Moreover, the prevalence of overweight children under 5 years old was 26.5% in 2022, though Ukraine is making efforts to prevent an increase. Data on rates of breastfeeding in Ukraine is limited. A 2012 UNICEF Multiple Indicator Cluster Survey found that only 19.7% of children under 6 months old were being exclusively breastfed (EBF), which is low compared to the Eastern Europe and Central Asia regional estimate of 33 per cent.[63]

Access to mental health support is also limited for children and their caregivers in Ukraine. The war is exacerbating mental health problems for children and their families. The long-term impacts of living through a war are likely to increase levels of anxiety and depression. The No Peace of Mind report published by World Vision in 2022, for example, highlighted that many children were sleep deprived due to war-related stress.[64] Only 8.5% of people receiving mental healthcare were under the age of 17, and there is a significant shortage of outpatient mental healthcare for children.[65] Psychological counselling is also required for parents and caregivers dealing with anxiety and exhaustion caused by the war. In a 2023 national needs assessment for mental health, nearly half (45%) of parents report that they struggle to support their children during this crisis.[66] Social protection services and parent support programmes are therefore vital to help parents and caregivers cope with the material, financial, and psychological stress of supporting their children as they cope with the impact of war.

As of February 2024, according to official records, the war has resulted in the tragic deaths of 10,582 civilians, including 587 children, and has caused injuries to 19,875 civilians.[67] The government is currently providing support to 24,613 families and institutions to care for orphaned children. The RDNA3 assessment indicates a loss of USD 14.3 billion in DALYs in the 22 months after the start of the full-scale war, marking a more than threefold increase compared to RDNA1.[68] Moreover, targeted attacks on healthcare centres are damaging key medical supplies and infrastructure. The World Health Organization recorded more than 1,000 attacks on healthcare centres over the first fifteen months of the full-scale war.[69]

2.2.3 Water, Sanitation, and Hygiene (WASH)

It is paramount that children have access to sufficient WASH services as lack of access to safe drinking water can prove to be a more probable risk than direct violence. Clean drinking water and proper sanitation services reduce the likelihood that children will develop diarrhoeal diseases; currently over 700 children (under the age of 5) globally die of these diseases every day.[70] In war-affected areas where services are dilapidated, children are 20 times more likely to die from these diseases than from war.[71] In Ukraine, the interdependence between essential services (water, power, and heat-

[60] Holt, E. (2024) War in Ukraine impacts immunization, accessed: August 16th 2024. Available here: https://www.thelancet.com/pdfs/journals/lanmic/PIIS2666-5247(23)00337-3.pdf.
[61] Loboda, A. et al. (2020). Child Health Care System in Ukraine. https://data.worldbank.org/indicator/SH.ANM.CHLD.ZS?locations=UA
[62] Global Nutrition Report (2022). Ukraine Country Profile. https://globalnutritionreport.org/resources/nutrition-profiles/europe/eastern-europe/ukraine/
[63] UNICEF Ukraine Multiple Indicator Cluster Survey 2012. https://mics-surveys-prod.s3.amazonaws.com/MICS4/Europe%20and%20Central%20Asia/Ukraine/2012/Key%20findings/Ukraine%202012%20MICS%20KFR_English.pdf.
[64] World Vision (2022). No Peace of Mind. https://www.wvi.org/publications/report/emergencies/no-peace-mind
[65] Heal Traumas Int'l (2023). Mental Health in Ukraine. https://reliefweb.int/report/ukraine/mental-health-ukraine-april-2023#:~:text=For%20example%2C%20Ukraine%20has%20joined,Mental%20Disorders%20in%20primary%20healthcare
[66] HAIS and Girls (2023). MHPSS Needs Assessment - 18 Months Later: A Mental Health and Psychosocial Needs Assessment Across Ukraine. https://hias.org/wp-content/uploads/HIAS-GIRLS-MHPSS-Full-Report-English.pdf
[67] UNHR (2024). Protection of Civilians: Impact of Hostilities, Two Year Update on Civilians Since 24 February 2022. https://www.ohchr.org/sites/default/files/2024-02/two-year-update-protection-civilians-impact-hostilities-civilians-24.pdf Figures refer to government-controlled areas only.
[68] World Bank (2023). Rapid Damage and Needs Assessment February 2022 – February 2023. https://ukraine.un.org/sites/default/files/2023-03/P180174 0d1177f03c0ab180057556615497.pdf
[69] The World Health Organization. (2023). WHO Records More Than 1,000 Attacks on Healthcare in Ukraine Over the Past 15 Months of Full-Scale War, accessed: 8 August 2023. https://www.who.int/europe/news/item/30-05-2023-who-records-1-000th-attack-on-health-care-in-ukraine-over-the-past-15-months-of-full-scale-war
[70] UNICEF (n.d.). Water, Sanitation and Hygiene (WASH). https://www.unicef.org/wash#:~:text=The%20consequences%20of%20unsafe%20water,lack%20of%20appropriate%20WASH%20services
[71] UNICEF (2019). Children Living in Protracted Conflicts Are Three Times More Likely to Die From Water-Related Diseases Than From Violence. https://www.unicef.org/press-releases/children-living-protracted-conflicts-are-three-times-more-likely-die-water-related

ing systems) means that if a single component is damaged, then several systems can be impacted. The attack on the Kakhovka dam in June 2023 has led to the destruction of both local and regional communities and resources.[72] A joint assessment by the Government and the UN found that the destruction of the dam led to 80 communities being flooded, which resulted in the loss of 37,000 homes, and disrupted water and sanitation services to nearly 1 million people.[73] Unreliable water supplies due to such disruptions increase the likelihood of household contamination, and many families in war-affected areas cannot afford to buy enough fuel to boil their water to reduce this risk.

Ukraine's WASH services required improvement even before the escalation of the full-scale war, with only 67.3% of citizens having access to piped water.[74] Even before 2022, there was significant inefficiency in water provision, with an estimated 36% of water lost nationally. This is likely in part due to gaps in the infrastructure; for example, 40% of water supply networks were in critical condition, and 35% of treatment plants needed rehabilitation.[75] As a result of challenges with water infrastructure, water quality remains a critical issue, with one-third of the drinking water samples failing to meet national standards.[76] Critically, national standards for water quality were already weaker than European standards, and have been further relaxed due under martial law. Moreover, compliance with water quality standards was poor before the start of the war in 2014 and have worsened since the 2022 escalation; as such, the quality of water being supplied to the population has deteriorated. Thus, the country is facing significant challenges with water quality. State water quality assessments in 2023 found violations with sanitary requirements in 52.1% of inspected water facilities, with the worst conditions in Mykolaiv (up to 80% deviations), Kherson (75%), Dnipropetrovsk (48%), and Odesa (62%).[77] The challenges are harder to tackle since Ukraine's WASH governance has remained fragmented over the years, with no updated national policies in a decade.

The war has significantly exacerbated WASH challenges in Ukraine, particularly for vulnerable groups like children. Access to clean, safe water has been disrupted due to infrastructure damage, increasing drinking water contamination. Unreliable water and lack of fuel for boiling heightens household contamination risks. People with disabilities and poorer families in frontline areas are especially affected as they have limited mobility. Of the 11 million people in Ukraine needing WASH aid, 21% are children.[78] Children missing regular schooling due to displacement also miss out on vital hygiene education. Internally displaced persons in crowded shelters often lack adequate facilities, with insufficient clean, functioning toilets in 25% of centres.[79]

2.2.4 Social Protection

The full-scale war has reversed poverty reduction gains in Ukraine, with over 7 million additional people now impoverished.[80] The poverty level is estimated to have grown from 39.1% in 2021 to 60.2% in 2022.[81] Children suffer disproportionately, with child poverty rates in 2019 already higher for families with children than those without. The burden of poverty is most pronounced in larger families, those with three or more children, where 59.7% are considered poor by relative standards, and 81.2% fall below the absolute poverty line.[82] While Ukraine provides extensive assistance to support families with young children, war-related migration and an increase in poverty is puts a significant strain on these programmes. IDPs needing social assistance have surged, while damaged infrastructure obstructs aid delivery. Eleven million are now food insecure, and many people's livelihoods have been destroyed.[83]

[72] OHCHR (2023). Report on the Human Rights Situation in Ukraine, 1 February to 31 July 2023. https://www.ohchr.org/en/documents/country-reports/report-human-rights-situation-ukraine-1-february-31-july-2023
[73] Government of Ukraine and United Nations (2023). Post-Disaster Needs Assessment: 2023 Kakhovka Dam Disaster.
[74] Government of Ukraine (2021). National Report on the Quality of Drinking Water and the State of Drinking Water Supply in Ukraine for 20230. https://www.minregion.gov.ua/napryamki-diyalnosti/zhkh/teplo-vodopostachannya-ta-vodovidvedennya/natsionalna-dopovid/naczionalna-dopovid-pro-yakist-pytnoyi-vody-ta-stan-pytnogo-vodopostachannya-v-ukrayini-za-2020-rik-2/
[75] World Bank (2022). Ukraine Water Supply and Sanitation Policy Note Toward Improved, Inclusive, and Sustainable Water Supply and Sanitation Services.
[76] Ministry of Ecology and Natural Resources of Ukraine, 2021.
[77] State Agency Service of Ukraine on Food Safety and Consumer Protection, 2024.
[78] UNICEF (2023). Ukraine Humanitarian Needs Overview.
[79] Ibid.
[80] World Bank (2023). Human Development Update.
[81] UNICEF Ukraine (2023). Child Poverty: Impact of the War on the Situation of Households with Children.
[82] UNICEF (2021). Child Poverty and Disparities in Ukraine. https://www.unicef.org/ukraine/en/media/14856/file
[83] People in Need (2024). Ukrainian Refugee Crisis: The Current Situation. https://reliefweb.int/report/ukraine/ukrainian-refugee-crisis-current-situation-encs; World Food Program (2023). War in Ukraine: How a Humanitarian Tragedy Fed a Global Hunger Crisis. https://www.wfp.org/stories/war-ukraine-how-humanitarian-tragedy-fed-global-hunger-crisis

Despite progress on codifying child social protection pre-war, the unprecedented scale of children needing support due to the war means an acute shortage of resources. The number of children living in poverty has increased dramatically from 43.2% in 2021 to an estimated 65.2% in 2022.[84] Ukraine provides extensive support to families with young children; this includes five state programmes of social payments: childbirth benefit, child benefit for single mothers, benefit for low-income families; subsidy for housing, utility services, and fuel (housing subsidy); and, social privileges.[85] The provision of these services has been commendable in the last few years, with nearly every second household (49.6%) with children being covered by social payments from at least one programme, with many of the programmes targeting the poorest 20%.[86] The Universal Child Benefit has the highest number of recipients of all cash transfer programmes as it is provided universally (without income testing). While the Ukrainian government has done a commendable job in providing orphan benefits, the number of vulnerable children has grown exponentially, requiring urgently scaled-up assistance. With children bearing the brunt of rising poverty, strengthening child-sensitive social protection must be central to rebuilding efforts. This includes tailored support responding to the socioeconomic shocks children and families now endure, enabling access to nutrition, healthcare, education, and protection services. Investing in the wellbeing of children through social protection is imperative for mitigating the war's intergenerational impacts, as an additional 4 million children aged 0-17 are projected to live in poverty due to the war.[87]

2.2.5 Child Protection

Ukraine's child protection system is still reliant on institutionalisation, although the country is gradually moving away from this model. As of 2015, there were 663 residential facilities around the country providing housing for disadvantaged children, including children requiring social assistance and children with special educational needs.[88] Most children have at least one living parent, and a substantial proportion live with disabilities. Despite reform efforts, the number of institutions increased to 727 in 2022, housing more than 91,000 children before the full-scale war.[89] Evidence overwhelmingly concludes that institutionalisation can be damaging for children, causing physical, emotional, and social problems later in life. Ukraine's accession aspirations into the EU makes the reform of the child protection sector more urgent to ensure it is in line with EU standards.

Investment in family-based care should help reduce levels of institutionalisation. The Better Care initiative prioritises support for families to ensure that children are not sent to institutions.[90] This support includes social assistance in the form of cash transfers, effective care policies, inclusive education and early childhood interventions (e.g., parenting programmes), and home visiting programmes.[91] The Better Care initiative is being developed and expanded to include psychosocial support, access to social services, and on-hand support for parents.[92] This expansion should help ensure that children do not enter institutions as they will be supported at home.[93] The development of and investment in the child protection workforce is also paramount, so well-trained, well-supported social workers are on hand to guide Ukrainian families.[94]

The war has severely impacted and disrupted child protection services in Ukraine as considerable essential infrastructure has been lost. Many children have had to be hastily returned from residential care to their families without proper safety assessments or support, putting them at heightened risk of violence, exploitation, and trafficking. Within the first month of the full-scale war, 90% of displaced Ukrainians were women and children, raising concerns about war-related sexual violence and abuse.[95] Access to mental health and psychosocial support services is a pressing need.[96] Strength-

[84] Ibid.
[85] UNICEF Ukraine (2023). Child poverty: Impact of the War on the Situation of Households with Children.
[86] Ibid.
[87] UNICEF, UNICEF Innocenti (2023). War and Economic Downturn: The Impact of the War in Ukraine and the Subsequent Economic Downturn on Children and Families in Europe and Central Asia. https://www.unicef-irc.org/publications/pdf/War_and_economic_downturn.pdf
[88] UNICEF (2023). Child Poverty: Impact of the War on the Situation of Households with Children.
[89] Human Rights Watch (2022). 'We Must Provide a Family, Not Rebuild Orphanages'. https://www.hrw.org/report/2023/03/13/we-must-provide-family-not-rebuild-orphanages/consequences-russias-invasion
[90] UNICEF (n.d.). UNICEF Launches 'Better Care for Every Child Program', accessed: 08 April 2024. https://www.unicef.org/ukraine/en/family-for-every-child#:~:text=We%20strive%20to%20ensure%20that,of%20every%20child%20in%20Ukraine
[91] UNICEF (2023). Ukraine's Integrated Social Service and Benefits Package.
[92] Ibid.
[93] Ibid.
[94] Social Service Workforce (2023). Key Recommendations on the Reform of Ukraine's Child Protection and Care System, accessed: 09 April 2024. https://www.socialserviceworkforce.org/system/files/resource/files/Reform_Ukraine_child_protection.pdf
[95] United Nations Development Coordination Office for Europe and Central Asia (2022). Implications of the War in Ukraine for Europe and Central Asia.
[96] Ibid.

ening child protection systems, including provision of comprehensive services at the local level and building capacity for family-based alternative care, needs to be prioritised, given the differing variety of risks that children and their families are exposed to. The safety and wellbeing of children, particularly those who are unaccompanied, separated, or displaced, is paramount and needs to be accounted for during rehabilitation of these public systems.

2.3 The Demographic Situation in Ukraine

Ukraine has experienced significant demographic changes over the past decades. Ukraine's demographics are an important consideration for the Investment Case, as they impact both the costs and benefits of scaling up interventions. The demographic situation in Ukraine has changed since the onset of the full-scale war. These changes have been considered within the Investment Case.

Prior to the onset of the full-scale war in 2022, Ukraine was facing long-term population decline. Following independence in 1991, Ukraine's population stood at 52 million people.[97] By 2021, its total population had fallen to 44 million.[98] In the three decades since independence, Ukraine has experienced increasingly high levels of emigration, with 1 million leaving between 1995 and 2015.[99] Factors that have contributed to this emigration include economic crises, political instability, and lower living standards than European norms.[100,101]

The escalation of the war exacerbated Ukraine's demographic decline. An estimated 7 million people have fled the country since February 2022, and a significant proportion of these people are young, working-age people. Thus, as of 2023, Ukraine's population is estimated to stand at just less than 37 million.[102] The percentage of children under the age of 17 was estimated at just 18.45% as of 2023 and is estimated to fall to 15.38% by 2050.[103] Children below the age of 5 made up about 4% of the total.[104] There are slightly more boys in Ukraine than girls, with almost 21% of children under the age of 17 being boys, compared to 16.34% girls.[105] For working-age adults, this distinction is sharper, with 45.95% of adults aged between 15-49 being men, compared to 37.72% women.[106]

2.3.1 Long-term Demographic Decline

Ukraine's population is ageing fast. Alongside migration, a driving factor is a significant drop in Ukraine's fertility rate. Between 1988 and 2001 the fertility rate halved to just 1.1 children per woman.[107] Birth rates recovered slightly, reaching 1.5 in 2012, but have since plummeted even further to 0.7 in 2023.[108] Thus, Ukraine has the lowest birth rate in the world, significantly below the replacement level of 2.1.[109] A combination of low birth rates and rising mortality rates means that Ukraine's population is aging quickly. As of 2023, 20% of the population was over the age of 65.[110] In comparison, just 10% of the world's total population is over the age of 65.[111]

[97] United Nations, Department of Economic and Social Affairs, Population Division (2022). World Population Prospects: The 2022 Revision. https://population.un.org/dataportal/data/indicators/49/locations/804/start/1991/end/2023/table/pivotbylocation

[98] Ibid.

[99] Gladun, O. and Romanuk, A. (2015). Demographic Trends in Ukraine: Past, Present and Future, Population and Development Review. https://www.jstor.org/stable/24639360?read-now=1&seq=1#page_scan_tab_contents.

[100] Lapshyna, I. (2023), Ukraine – Emigration and Displacement in the Past and Present, Politk. https://www.bpb.de/themen/migration-integration/laenderprofile/english-version-country-profiles/510002/ukraine-emigration-and-displacement-in-past-and-present/

[101] United Nations (2024). Total Population by Sex, The World Population Prospects, accessed: 26 March 2024. https://population.un.org/dataportal/data/indicators/49/locations/804/start/2023/end/2060/table/pivotbylocation?df=46cfd2f9-a3ea-4bd2-a414-9854aaded289

[102] Ibid.

[103] United Nations (2024). Percentage of Total Population by Broad Age Group, World Population Prospects, accessed: 26 March 2024. https://population.un.org/dataportal/data/indicators/71/locations/804/start/2023/end/2060/table/pivotbylocation?df=b09682fc-8bb8-470e-b4b4-b43b5e69ad18.

[104] Ibid.

[105] Ibid.

[106] Ibid.

[107] Gladun, O. and Romanuk, A. (2015). Demographic Trends in Ukraine: Past, Present and Future, Population and Development Review. https://www.jstor.org/stable/24639360?read-now=1&seq=1#page_scan_tab_contents

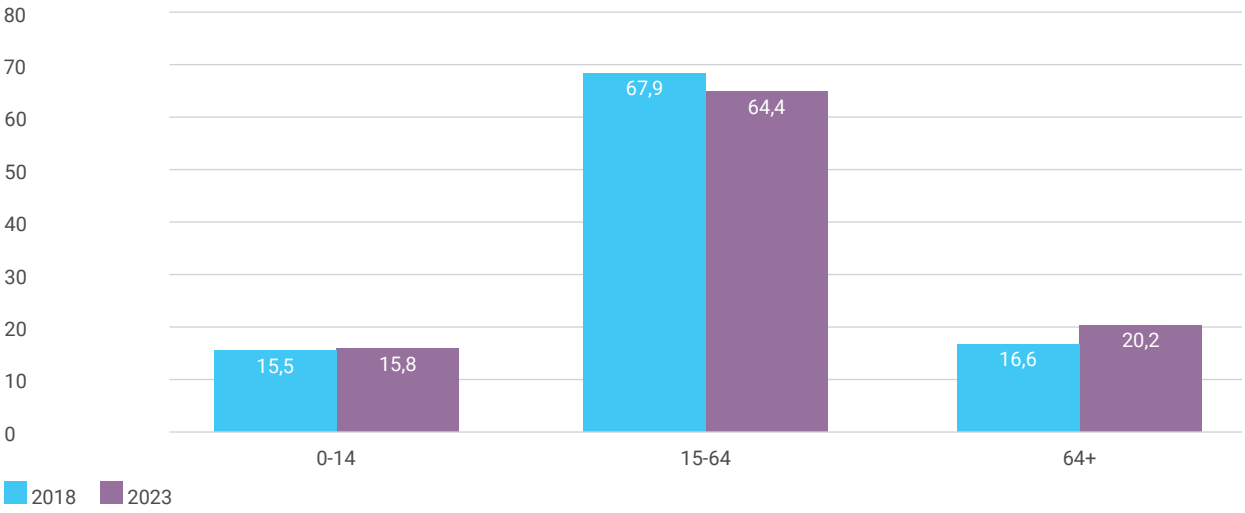
[108] The World Bank (2021). Fertility Rate, Total (Births Per Woman) – Ukraine, accessed: 01 May 2024. https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?locations=UA; Segura, C. (2023). Ukraine's Demographic Drain Puts Its Post-War Recovery at Risk, accessed: 01 May 2024. https://english.elpais.com/international/2023-12-11/ukraines-demographic-drain-puts-its-post-war-recovery-at-risk.html?outputType=amp

[109] Craig, J. (1994). Replacement Level Fertility and Future Population Growth, accessed: 01 May 2024. https://pubmed.ncbi.nlm.nih.gov/7834459/#:~:text=In%20developed%20countries%2C%20replacement%20level,need%20to%20be%20much%20higher

[110] The World Bank (2022). Population Aged 65 and Above, Ukraine. https://data.worldbank.org/indicator/SP.POP.65UP.TO.ZS?locations=UA

[111] Ibid.

Figure 4. Population of Ukraine, 2018-2023[112]



In the context of the war, this demographic decline has had significant consequences. Older people have been less likely to leave their homes and thus face challenges in finding suitable shelter and basic necessities.[113] Social networks have broken down due to a lack of communication and high levels of migration, isolating the elderly.[114] At the same time, young, working age people are the ones who have largely left Ukraine, exacerbating the gap between the elderly population and the working age population. Moreover, the birth rate has plummeted even further during the war, dropping by another 28% during the first year of the full-scale war.[115] These factors are causing Ukraine's population to age faster, in a trend that looks likely to continue. The United Nations Population Fund (UNFPA) predicts that by 2050, one in every three Ukrainians will be over the age of 60.[116]

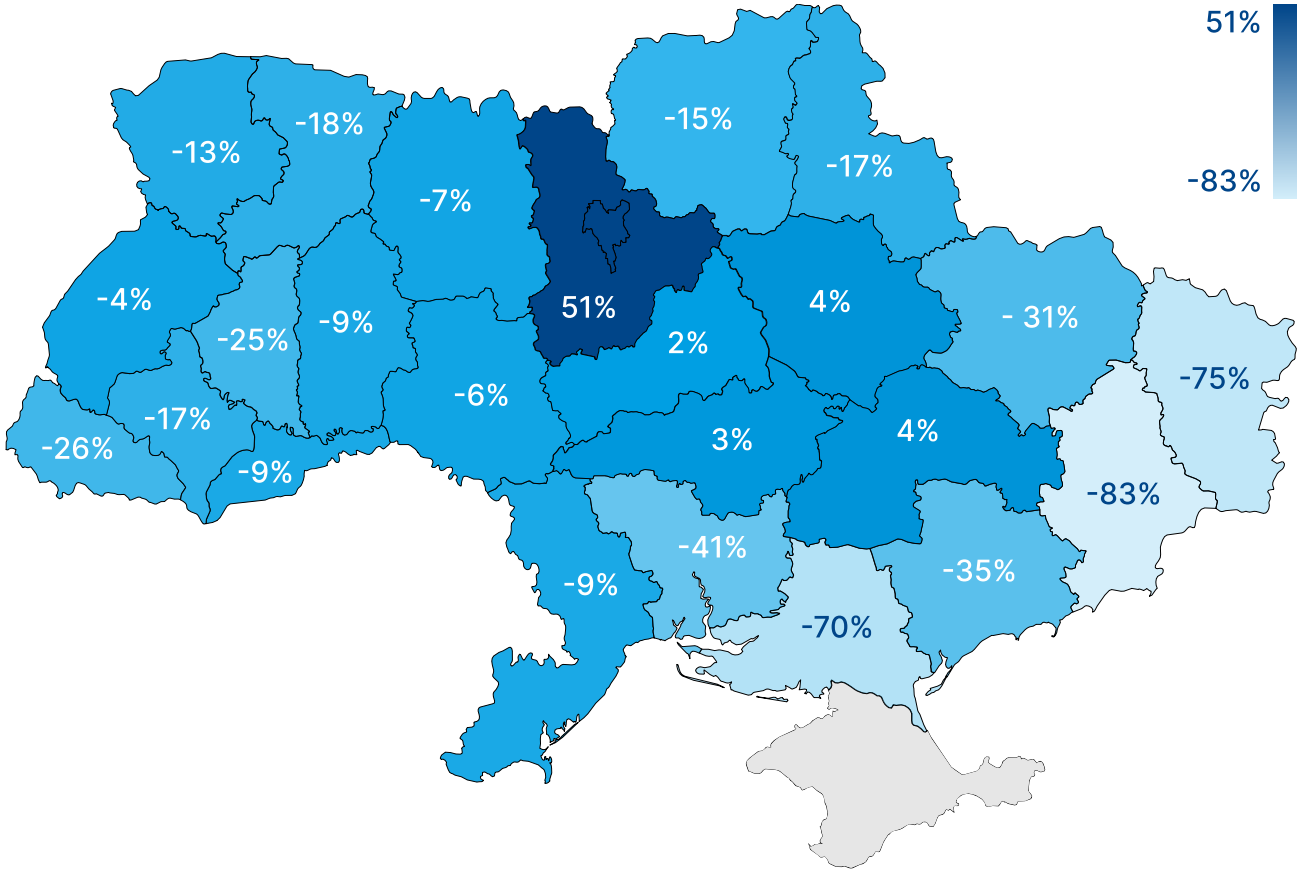
2.3.2 Impact of the War

Estimates of Ukraine's future population after the full-scale war differ but are pessimistic. The most optimistic projections estimate that Ukraine's population will continue declining until 2052, from 44 million in 2022 to just less than 35 million.[117] In more pessimistic scenarios, it is estimated that Ukraine's population will decline by 32% to just less than 30 million.[118] The driving factor for this mass displacement has been the destruction of civilian infrastructure and civilian casualties that have forced citizens to go elsewhere for safety.[119] Women and children account for 90% of those leaving the country, most of whom have gone to other countries in Europe.[120] However, Ukraine's martial law has also had an impact, particularly on young men, with many also attempting to flee the country to avoid military conscription.[121] Some estimates suggest this figure could be as high as 768,000 as of the end of 2023.[122]

Changes in the population differ significantly by oblast. A significant number of oblasts in Ukraine have seen their population decline since the start of the war, particularly in the East. Figure 5 illustrates the percentage decline in each oblast between February 2022 and August 2023.

[112] United Nations, Department of Economics and Social Affairs (2022). Percentage of Total Population by Broad Age Group, Ukraine. https://population.un.org/dataportal/data/indicators/71/locations/804/start/2018/end/2023/table/pivotbylocation
[113] The World Health Organization (2022). Joint Statement on the Situation of Older Persons in Ukraine. https://www.who.int/europe/news/item/14-06-2022-joint-statement-on-the-situation-of-older-persons-in-ukraine
[114] Ibid.
[115] BBC (2023). Ukraine War Causes Birth Rate to Slump. https://www.bbc.co.uk/news/world-europe-66376561
[116] The United Nations Population Fund (2021). UNFPA Ukraine. https://www.unfpa.org/data/transparency-portal/unfpa-ukraine#:~:text=Ukraine's%20demographic%20crisis%20combines%20an,one%20in%20three%20by%202050
[117] Joint Research Centre (2023), The War Exacerbates Ukraine's Population Decline, EU Science Hub. https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/war-exacerbates-ukraines-population-decline-new-report-shows-2023-03-08_en.
[118] Ibid.
[119] UNHCR (2023). Ukraine Refugee Situation. https://data.unhcr.org/en/situations/ukraine
[120] UNHCR (2023). Ukraine Crisis. https://www.unrefugees.org/emergencies/ukraine/
[121] Ibid.
[122] BBC (2023). Ukraine War: Male citizens living abroad to be asked to join the army, accessed: 26 March 2024. https://www.bbc.com/news/world-europe-67787173.

Figure 5. The Percentage Change in Population Across Oblasts in Ukraine, February 2022 - August 2023[123]



Internal displacement has also been a key aspect of Ukraine's demographic changes. The Internal Displacement Monitoring Centre estimated that between 2019 and the end of 2022, the number of internally displaced people had risen from just under 900,000 to 5.9 million people.[124] Internal displacement peaked in May 2022, where 8 million people were internally displaced.[125] Following this, displacement figures started to decrease, although they have remained at over 10% of Ukraine's total population.[126] Given the nature of the war, the East macro-region has been the main origin of IDPs, while it also hosts the largest number of IDPs (as of 2022, 1.9 million people were displaced in the East).[127] The war has seen the proportion of female IDPs significantly increase from 46% in March 2022 to 70% in August 2022. Only 6% of IDPs were under the age of 25, while 46% were over the age of 60.[128] IDPs face considerable challenges when trying to resettle, particularly with housing, employment, and income.[129] Displacement also takes a psychological toll, exacerbating the emotional impacts of the war.[130] Since mid-2022, displacement figures have plateaued but look unlikely to significantly decrease in the near future.[131]

Figure 6 and Figure 7 illustrate the population of Ukraine by oblast in February 2022 and August 2023, respectively. The population density is greatest in the darkest coloured oblasts. Comparing the two maps shows population movement, most significantly from the east of Ukraine towards the west and centre, and emphasises the impact of internal displacement across the country.

[123] Ukraine State Statistics (2022). Population by Region. https://ukrstat.gov.ua/; UNFP (2023). Population Splits. *Please note: there is no available data for the Republic of Crimea since its annexation in 2014.
[124] IDMC (2023). Country Profile Ukraine. https://www.internal-displacement.org/countries/ukraine
[125] European Union Agency (2022). Forced Displacement from Ukraine: Profiles, Experiences, and Aspirations of Affected Populations. https://euaa.europa.eu/sites/default/files/publications/2022-11/2022_11_09_Forced_Displacement_Ukraine_Joint_Report_EUAA_IOM_OECD_0.pdf
[126] Ibid.
[127] Ibid.
[128] Ibid.
[129] Gerber, T. et al. (2023). Internal Displacement and Subjective Well-being: The Case of Ukraine in 2018. https://academic.oup.com/sf/advance-article/doi/10.1093/sf/soad124/7287283
[130] Ibid.
[131] IDMC (2023). Country Profile Ukraine. https://www.internal-displacement.org/countries/ukraine

Figure 6. Total Population of Ukraine by Oblast, February 2022[132]

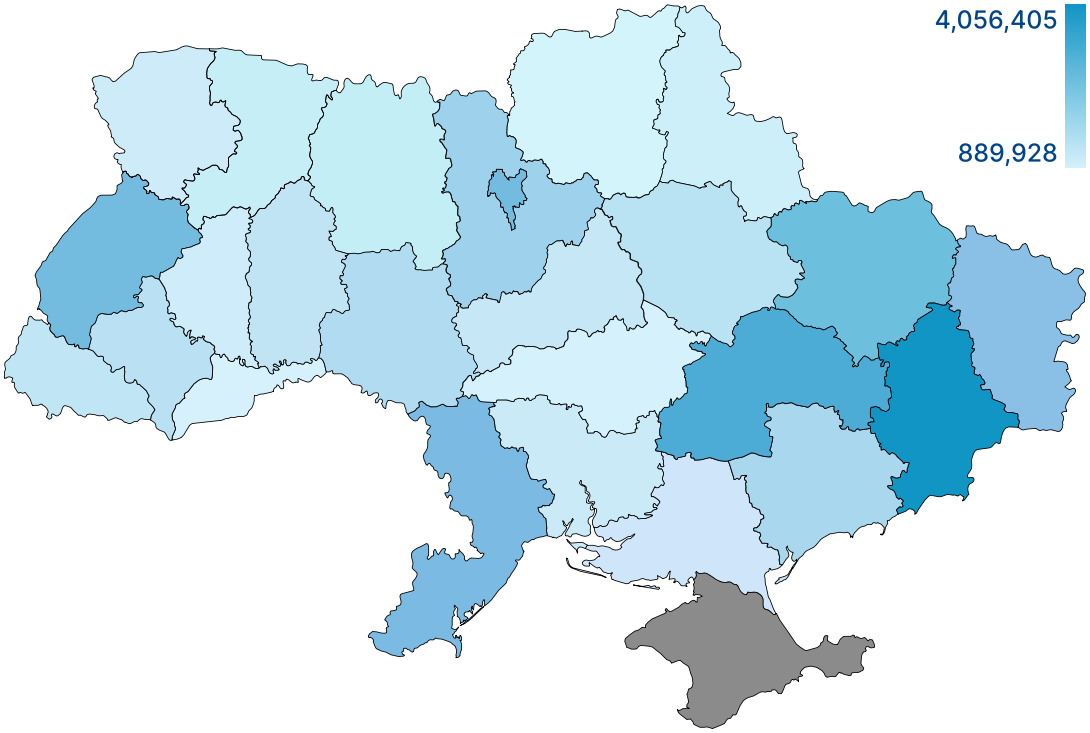
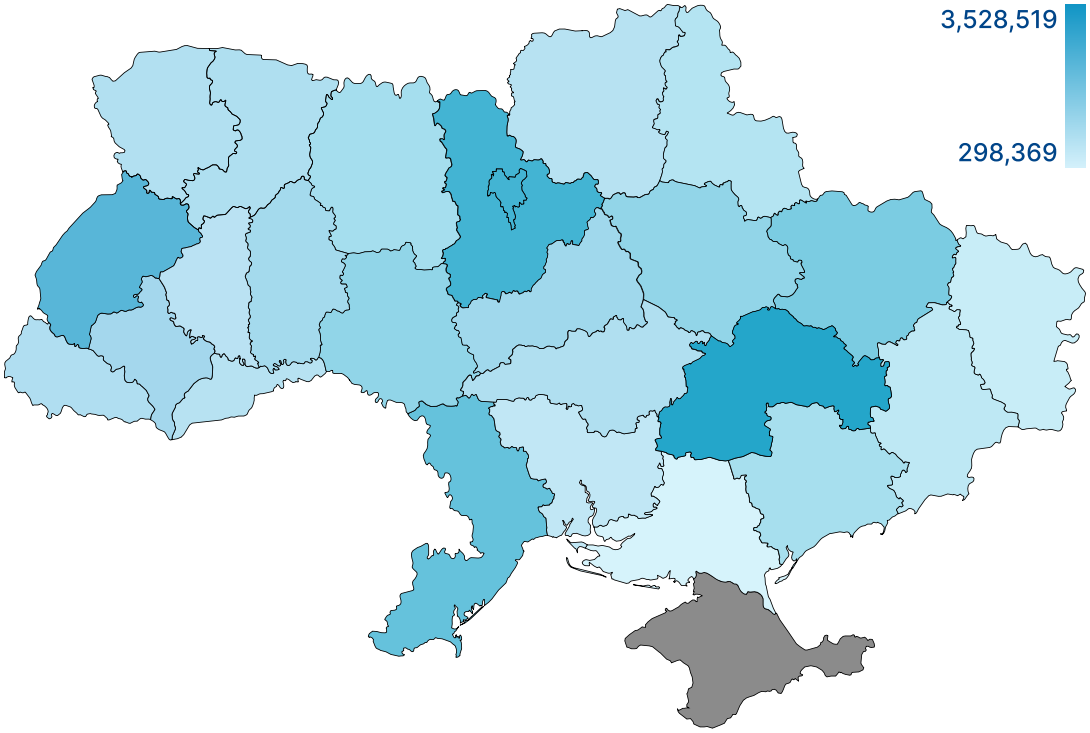


Figure 7. The Total Population of Ukraine by Oblast, August 2023[133]



[132] Ukraine State Statistics (2022). Population by Region. https://ukrstat.gov.ua/; UNFPA (2023). Population Splits. *Please note there is no available data for the Republic of Crimea since its annexation in 2014.
[133] Ibid.

2.3.3 Impact on Young Children

The demographic situation in Ukraine significantly impacts young children. An aging population increases the amount of unpaid care a smaller working-age population is required to do.[134] It also reduces economic growth as countries have a larger number of dependents and a smaller number of working-age people.[135] A smaller working population has to support the dependent, retired population through various contributions (e.g., both directly, in the form of care duties, and indirectly, through increased taxes to fund social programmes). An aging population can put significant pressure on social services, most notably on health and social protection services.[136] Older societies are also likely to have lower productivity, in part because many have stopped working, but also because those who continue to work are less productive.[137] Thus, economic growth is impacted, which has wider effects on young children. Economic decline, coupled with a younger population shouldering the burden of care for the dependent population, can lead to lower quality of social services available for young children and overcrowding for services that do exist, especially if the budget for expansion is limited.[138]

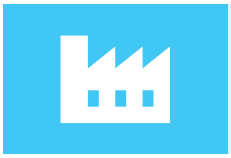
The ongoing war is exacerbating the challenges children face. A substantial number of young families and working-age Ukrainians have chosen to leave the country due to the war, worsening the demographic trend highlighted above. As a result, the dependency ratio of Ukrainians who remain has increased, putting further strain on family relationships which often impact young children.[139] A larger number of elderly people, who are vulnerable to illness and injury during the war, puts increased pressure on already strained healthcare systems.[140]

2.3.4 Population Assumptions

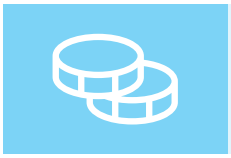
Ukraine's current demographic situation is a significant concern, and as such it is important that the Investment Case considers impacts that could positively alter Ukraine's current trajectory. There are several ways that increased investment into the proposed interventions could do this.

Box 1: Demographic Benefits of Increasing Investment in Early Childhood Development

Augmented investment in early childhood services will incentivise the return of families to Ukraine, as an improvement in services will enhance human capital prospects. As these children grow, the benefits of ECD interventions will increase their productivity as working-age adults through better health and educational opportunities, leading to economic growth for the country at large.



Investing in ECD will enhance Ukraine's future workforce by improving the long-term economic and social prospects for its citizens. Given Ukraine's aging population, cultivating a well-educated and economically prosperous working-age demographic is imperative to ensure adequate support for them.



Strategic nationwide investment will enhance service equity across various oblasts, particularly those affected by the war. This will incentivise the return of internally displaced persons to their original oblasts, where possible, promoting population balance throughout Ukraine.

The following assumptions are incorporated into the methodology, which will be significant for the outcome of the Investment Case.

[134] National Institute of Aging (n.d.). Improve Our Understanding of the Consequences of An Aging Society to Inform Intervention Development and Policy Decisions, accessed: 26 March 2024. https://www.nia.nih.gov/about/aging-strategic-directions-research/goal-society-policy#:~:text=Societal%20aging%20can%20affect%20economic,of%20chronic%20disease%20and%20disability.

[135] Ibid.

[136] Ibid.

[137] Fomin, O. (2019). The Impact of Population Aging on Regional Economic Growth in Ukraine, accessed: 26 March 2024. https://kse.ua/wp-content/uploads/2019/04/Oleksandr-Fomin_Thesis.pdf.

[138] Ibid.

[139] National Institute of Aging (n.d.). Improve Our Understanding of the Consequences of An Aging Society to Inform Intervention Development and Policy Decisions, accessed: 26 March 2024. https://www.nia.nih.gov/about/aging-strategic-directions-research/goal-society-policy#:~:text=Societal%20aging%20can%20affect%20economic,of%20chronic%20disease%20and%20disability.

[140] Galvani, A., et al. (2023). Disease Burden Amount Ukrainians Forcibly Displaced by the 2022 Russian Invasion, accessed: 26 March 2024. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9974407/

Box 2: Methodological Implications of Demographics

Population Changes	As per UN population prospects, it is assumed that the population of Ukraine will increase until 2031 when it will almost return to the 2022 population level of 39 million. Afterwards, the population will most likely begin decreasing again. Scaling up the coverage rates for the selected interventions has been done on this assumption.
Internally Displaced Persons	The Investment Case assumes that it will be challenging for IDPs to return home while the war is ongoing. Therefore, resources for scale-up up will be prioritised for the highly populated oblasts while the war is ongoing. However, the Investment Case also recognises that people may want to return after the war has ended. To that end, it will be important to ensure that resources are also set aside to scale-up and improve services in oblasts that have experienced severe damage. The situation is slightly different for non-government-controlled areas (NGCA), as it is not guaranteed that these areas will be under the full control of Ukraine after the war. Given this uncertainty, it is suggested that, in the short term, the scale-up be focused on areas where return is likely, including frontline areas, rather than NGCAs. This approach can be re-evaluated as the war unfolds.
Refugees	The Investment Case also assumes it will be challenging for refugees to return while the war is ongoing. It also recognizes that refugees may not want to return, e.g., they may wish to remain in the EU. However, the package of interventions selected for this Investment Case should develop an incentive to return as quality ECD interventions are scaled-up. This is important as many refugees are young women and children. Interventions are prioritised that are likely to encourage population growth and make recommendations for incentives for return.

2.4 Accession into the European Union

The European Union (EU) accession process is important to this study. As part of the accession process, there are specific requirements outlined in the EU *Acquis* Ukraine must meet to progress its application.[141] It is one of the objectives of this study not to compromise this progress, but to support its realisation. The EU accession offers promises to candidates, such as Ukraine. There is also a history of relations between the two actors, including since the escalation to full-scale war. Thus, the requirements of EU accession are important in influencing the methodology of this study.

Accession to the EU offers significant potential benefits to candidates. In purely economic terms, there are indications that the benefits of EU membership outweigh the costs for new joiners. A study conducted by the Centre for Economic Policy Research found an approximate 12% gain in per capita Gross Domestic Product (GDP) on average for members, despite substantial differences across countries.[142] The EU highlights several further benefits and achievements, including:

- the potential for increased political influence.
- funding schemes and grants in multiple sectors to aid economic development.
- over 70 years of peace and stability.
- freedom of movement.
- protections for the environment, human rights, and consumers.[143]

Ukraine's relationship with the EU stretches back several decades. Ukraine declared independence from the Soviet Union in 1991; and in 1994, the EU and Ukraine started their first official partnership with a Partnership and Cooperation Agreement. In 2005, the EU and Ukraine launched an Action Plan under the European Neighbourhood Policy that aimed for gradual economic integration and a deepening of political cooperation. In 2008, the EU and Ukraine began negotiations on an Association Agreement (AA), focusing on support for reforms, recovery, and increased foreign aid; and on prospects for gradual integration with the EU's internal market. In 2014, following the Revolution of Dignity and Russia's initiative of invasions and annexation of Crimea, both the political and economic elements of the AA were signed by the Ukrainian Government.

[141] Acquis - European Commission (europa.eu)
[142] Coricelli, F. et al (2014) How much do countries benefit from membership in the European Union? Available at: https://cepr.org/voxeu/columns/how-much-do-countries-benefit-membership-european-union
[143] European Union (2023) Key European Union achievements and tangible benefits. Available at: https://european-union.europa.eu/priorities-and-actions/eu-priorities/achievements_en

Since the full-scale war began in February 2022, progress towards Ukraine's accession to the EU has accelerated. Four days after the escalation, Ukraine sent its application for EU membership. In June 2022, Ukraine was granted candidate status on the understanding that the country had to undertake some "key steps", which included a range of economic and political criteria.[144] These key steps are based on the Copenhagen criteria. The economic criteria relate to the existence of a functioning market economy and the capacity to cope with competitive pressure and market forces within the EU. The political criteria relate to the stability of institutions guaranteeing democracy, the rule of law, human rights, and respect for and protection of minorities. In a report released in November 2023, the EU reported that Ukraine was making considerable progress with these reforms. They stated that "the Ukrainian Government and Parliament showed determination to carry out the necessary reforms required by the EU accession process, in particular the seven steps mentioned in the Opinion".[145] This progress led to a decision in December 2023 to formally open accession negotiations.

The partnership has included funding commitments from the EU to support Ukraine's war response. Since the full-scale war commenced, the EU, Member States, and European financial institutions have mobilised around EUR 9.5 billion in the form of macro-financial assistance, budget support, emergency assistance, crisis response, and humanitarian aid to support Ukraine's overall economic, social, and financial resilience.[146] Furthermore, in **June 2023**, the Commission proposed to set up the Ukraine Facility, a new tool to support Ukraine's recovery, reconstruction, and modernisation. this Facility would be "the dedicated financial instrument that will provide coherent, predictable, as well as flexible, support for the period 2024-2027 to Ukraine, adapted to the unprecedented challenges of supporting a country at war".[147] The **overall amount of the Facility is EUR 50 billion** for the period of 2024 to 2027.

The EU works closely with Ukraine to support ECD. The EU accession process is important in supporting childcare reform across the country. The European Commission has already granted EUR 10 million to Ukraine for developing a modern childcare strategy.[148] Care reform is a significant area of focus for the EU, and is aimed at increasing the number of children in family-based care rather than in institutions. In June 2023, this support was reaffirmed by the Swedish Presidency of the Council of the EU through a declaration on EU support for reforming the child protection system in Ukraine.[149] The Emergency Early Childhood Development Support for Ukrainian Refugees project provides emergency support to children who have been displaced outside of Ukraine, particularly those at risk of developmental delays.[150]

Box 3. Methodological Implications of the EU Accession

The methodology of this report will be impacted in two ways by the ongoing accession process:

1	**Service Selection:** It was important to ensure the Investment Case prioritises services that align with the EU, such as the EU acquis framework and other key documentation of the EU. The ECD sector should contribute to Ukraine's overall accession agenda to the EU. In the case of ECD, ensuring progress is made in deinstitutionalisation is especially important for this, given its priority to the EU. As such, compliance with the EU accession process is used as one of the four criteria for selecting services.
2	**Financing Options:** The scale of the financial commitments from the EU to support Ukraine's recovery is notable, particularly the EUR 50 billion package known as the Ukraine Facility. This tool has the potential to be a key source of financing for the scale-up of ECD services. The Facility will be strongly considered in the fiscal space analysis financing options to ensure this fund is being utilised in the most effective way.

[144] European Union (2023). European Neighbourhood Policy and Enlargement Negotiations (DG NEAR). https://neighbourhood-enlargement.ec.europa.eu/european-neighbourhood-policy/countries-region/ukraine_en

[145] European Commission (2023). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. https://neighbourhood-enlargement.ec.europa.eu/system/files/2023-11/SWD_2023_699%20Ukraine%20report.pdf

[146] European Union (2023). European Neighbourhood Policy and Enlargement Negotiations (DG NEAR). https://neighbourhood-enlargement.ec.europa.eu/european-neighbourhood-policy/countries-region/ukraine_en

[147] Ibid.

[148] Papancheva, I. (2023). Harnessing the Potential of EU Accession to Drive Care Reform: Spotlight on Ukraine and Moldova, accessed: 23 February 2024. https://www.hopeandhomes.org/blog/harnessing-the-potential-of-eu-accession-to-drive-care-reform-spotlight-on-ukraine-and-moldova/

[149] Swedish Presidency of the Council of the European Union (2023). Declaration on Protecting Children in Ukraine and in the European Union: EU Support for Reforming the Child Protection System in Ukraine, accessed: 23 February 2024. https://bettercarenetwork.org/sites/default/files/2023-06/swedish_eu_presidency_june_2023_declaration-on-protecting-children-in-ukraine-and-in-the-european-union.pdf

[150] European Association of Service Providers for Persons with Disabilities (2022). Emergency Early Childhood Development Support for Ukrainian Refugees, accessed: 23 February 2024. https://easpd.eu/project-detail/ecdur/#:~:text=The%20Emergency%20Early%20Childhood%20Development,%2C%20Slovenia%2C%20Poland%20or%20Moldova

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3

Investment Case

The purpose of this study is to illustrate the compelling case for investment in early childhood in Ukraine. A package of services deemed critical to development in the early years (up to six years old) was developed, in consultation with stakeholders in Ukraine. The package was designed based on international best practice (informed, for example, by the Nurturing Care Framework), principles of equity and inclusion, the relevance of the service to Ukraine, and pre-existing evidence on the (cost-) effectiveness of the service.

This Investment Case is based on two types of research into the impact of ECD-specific and ECD-sensitive services: both quantitative and qualitative analysis using key informant interviews and literature to develop an economic evaluation. An overview of each of these forms of analysis and how they were used is outlined below, including tables that indicate which research methods were applied to the evaluation of different services in the ECD sub-package.

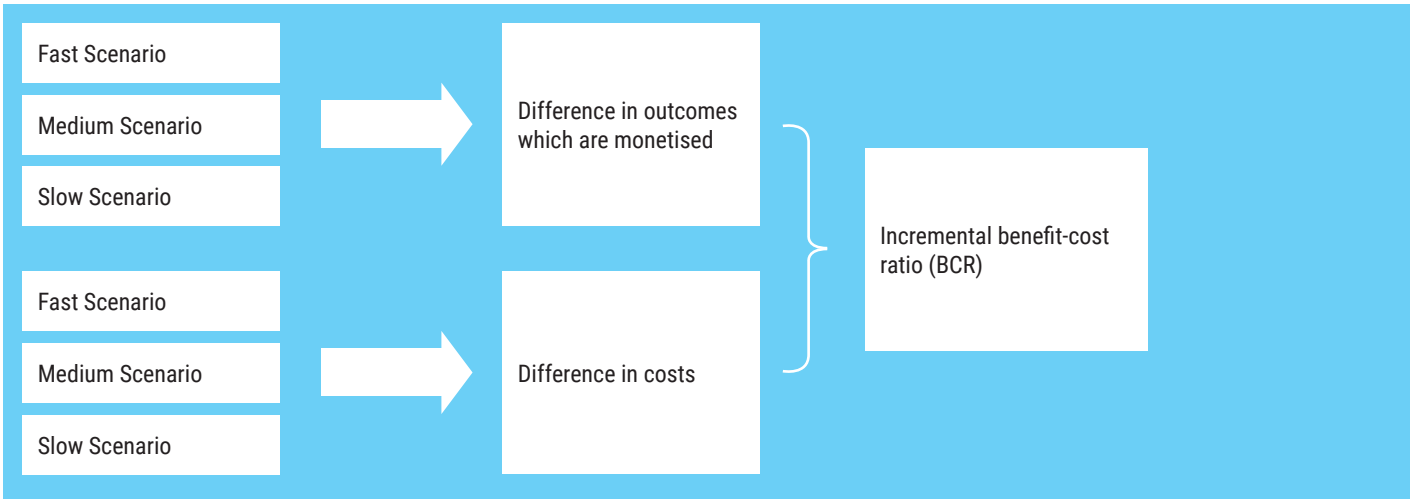
Economic Evaluation

The economic evaluation component of this study takes the form of cost-benefit and cost-of-inaction analyses. These forms of analyses involve weighing up the positive and negative impacts of an intervention, measured in costs and (monetised) benefits. In the cost-of-inaction analysis, the opportunity cost of failing to invest in an intervention is identified. This is calculated by presenting the total monetized benefits of the intervention minus the costs. Meanwhile, for the cost-benefit analysis, the total monetised benefits of an intervention are divided by the costs to create a ratio; this ratio expresses how much would be returned to society for each UAH 1 invested. The outcomes of both forms of analyses are intended to provide valuable information to decision-makers on whether or not the intervention has a net benefit and is, therefore, advisable.

The economic evaluation model was designed to provide evidence on whether a policymaker should invest in increasing the coverage of a set of ECD-specific or ECD-sensitive services. The analysis has the following parameters:

- **Intervention**: The intervention being studied is the scale-up in coverage of a set of ECD-specific and ECD-sensitive services. Most of these services are already being implemented in Ukraine. This study analyses the economic case for increasing the coverage to universal (or near universal) levels. Universal coverage was selected as the target as all these interventions are deemed to be essential to ECD and every child requires them to survive and thrive.
- **Time horizon**: A medium- to long-term time horizon was adopted. The study analyses the impacts (costs and benefits) of the set of services from the baseline year (2023) to the final year (2050).
- **Discount rate**: Many of the costs and benefits modelled in this study accrue for many years in the future. As a way of accounting for their present value, social discount rates (SDRs) are applied to report costs and benefits in discounted terms. An SDR of 5% has been adopted, in line with guidance cited in Haacker et al. (2020) on appropriate discount rates in economic evaluations for low- and lower-middle income countries.[151]
- **Package**: The ECD services selected for study were grouped and studied by sector (early education and care; health and development; social protection and child protection; and, water, sanitation, and hygiene). In effect, an ECD sub-package for each of these sectors was studied independently. This decision was taken to support advocacy efforts, so that cost and benefit estimates spoke directly to the mandates of different line ministries within the government of Ukraine.
- **Scenarios**: The costs and benefits of each ECD sub-package were projected across four scenarios. These scenarios include:
  - **Baseline Scenario**: The current rates of coverage for all services in the package are maintained throughout the study time horizon. This scenario is a 'do nothing' status quo against which the benefits and costs of scale-up scenarios can be compared to find the additional, or 'net', benefits and costs (shown schematically in Figure 9).
  - **Fast Scale-up Scenario**: Coverage rates for each service are scaled up incrementally from their baseline rate to the target rate by 2030, and then maintained for the remainder of the study period. This scenario was selected to show the outcomes of adopting a very ambitious strategy, and the time horizon runs in line with SDG targets.
  - **Medium Scale-up Scenario**: Coverage rates for each service are scaled up incrementally from their baseline rate to the target rate by 2040, and then maintained for the remainder of the study period. This middle-ground scenario is balanced between the ambitious fast scale-up scenario and the slow scale-up scenario.
  - **Slow Scale-up Scenario**: Coverage rates for each service are scaled-up incrementally from their baseline rate to the target rate at the end of study period.

Figure 8. Schematic Representation of a Cost-Benefit Analysis



[151] M. Haacker, T. B. Hallett, and R. Atun (2020). On Discount Rates for Economic Evaluations in Global Health, Health Policy Plan, 1;35, (1), 107-114.

The methodology for estimating the costs and benefits of ECD services differs across the sub-packages. For all sub-packages, the methodological approach to estimating costs and benefits (and their monetisation) is explored, including the models used, key assumptions made, and data used. This is followed by reporting on the additional (total minus the baseline) costs and benefits of each scale-up scenario. The monetised benefits and costs were then compared and are expressed as incremental benefit-cost ratios and cost of inaction.

To produce these outputs, reliable input evidence is required for each service being evaluated. The types of data required include: the current coverage rate of the service, the cost, the expected impacts of the service, and the effectiveness of the service on these impacts. Further, there must also be evidence on how the impact (e.g., reduced child mortality) will produce economic benefits (e.g., increased productivity and economic contribution later in life). Available data was collected from relevant sources with preference placed on data collected recently in Ukraine. However, for some services, this evidence was not available. In these cases, essential data did not exist to undertake econometric analysis (costs and/or benefits could not be projected); however, existing evidence suggests that these services remain crucial for holistic development in early childhood. For this reason, additional research methods were employed to assess the benefits of these services and develop a case for investment.

Qualitative Research

It was not possible to include all interventions in the economic evaluation. Data on the long-term impacts of some interventions was simply not available. To model and monetise benefits, there must be evidence available on the long-term impacts of an intervention and how these impacts will produce economic benefits (e.g., increased productivity and economic contribution later in life). Nevertheless, it was important to include several key interventions in this study for which it was not possible to model their economic benefits. As such, concise literature reviews were conducted to illustrate the benefits of key interventions that could not be included in the economic evaluation. (These literature reviews have been included in the benefits sections of this report.) An assumption can be made that continued investment into these interventions will produce long-term monetary and non-monetary benefits. However, it is recommended that long-term impact evaluations be conducted on each of these interventions to gain an understanding of the impacts and effectiveness of the different interventions.

Literature reviews were conducted through desk-based research. The study team collected open-access electronic or physical documentations and data through desk-based research, which included: programmatic documents, secondary data, relevant published literature, and policy and strategy documents (including grey literature). For each intervention included in the literature reviews, the team analysed a range of sources about the intervention in Ukraine, in the region, and internationally. This research provided a comprehensive overview of the benefits of investing in these interventions. Where possible, additional research was led by evidence from Ukraine, although regional and international evidence was used where appropriate. The literature reviews have been incorporated into the relevant benefit sections throughout this report.

Primary data collection was conducted to support the evidence on benefits, particularly for those interventions not included in the economic evaluation. Partnership for Every Child (P4EC) carried out interviews in ECEC centres in Chernihiv and Dnipropetrovska Oblasts. These key informant interviews (KIIs) were semi-structured, providing interviewees with the opportunity to give additional insights as they deemed relevant. KIIs were carried out with directors of ECEC centres, and ten interviews were conducted in total. In-country team members from P4EC selected the initial participants. Snowball sampling was also utilised. This method involved asking interviewees who else they would recommend speaking to, and then reaching out to those individuals. The objective of the KIIs was the gain a deeper understanding of the status of ECD in Ukraine from those who work in it, particularly on the impacts of the war, the status of child mental health, and the effectiveness of inclusive education. All respondents have been kept anonymous throughout the report. Findings from the KIIs have been incorporated where appropriate in this report.

3.1 Early Childhood Education and Care

3.1.1. Overview

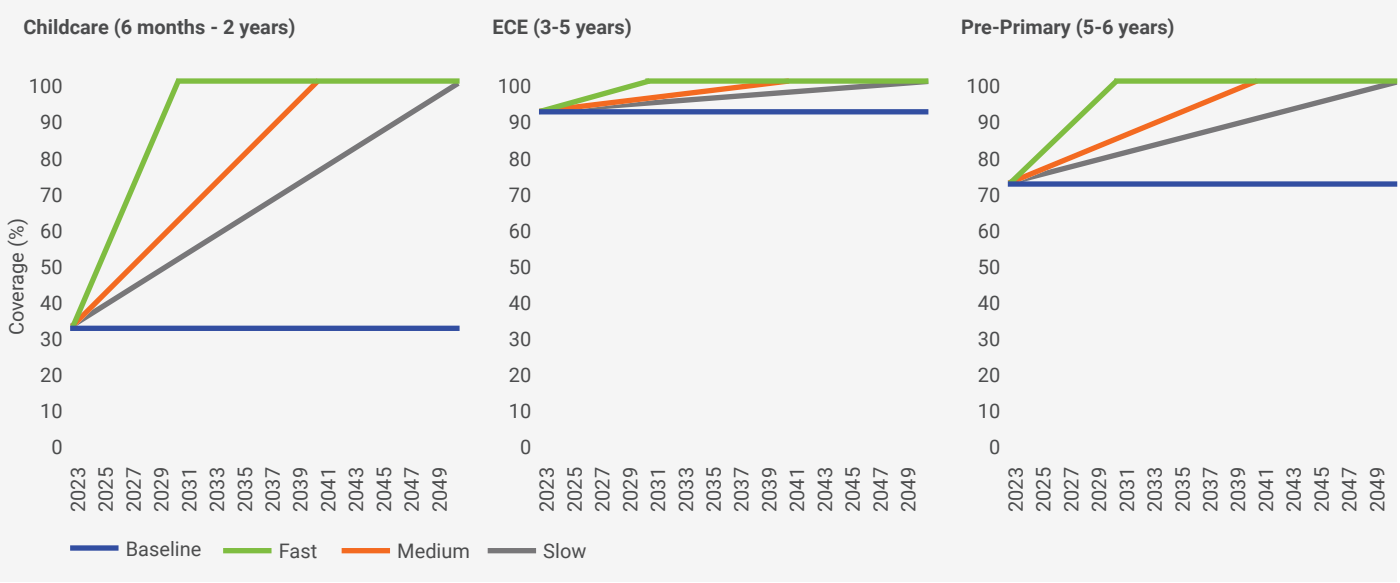
Here are the key findings from the analysis done on Early Childhood Education and Care (ECEC). This section begins with cost estimates, then illustrates the benefits that could be gained from scaling-up ECEC services before detailing the economic evaluation, including the benefit-cost ratios that could be gleamed from these investments. Literature reviews completed for interventions that could not be quantitatively modelled are included in the benefits section.

Opportunities for early learning are a core component of the Nurturing Care services young children require for them to survive and thrive. In the context of Ukraine, the scale-up in coverage of three key ECEC services have been modelled. These services are outlined in Table 11 alongside the baseline coverage rate of the service and the target which was set. All these services would not only support early learning but also enhance other aspects of the Nurturing Care framework, including ensuring responsive caregiving, as well as safety and security.

Table 11. Services Included in the Package

Service	Baseline	Target	Notes
Quality childcare provision for children 6 months – 2 years old, (% of children in need)[152]	33%	100%	Economic Evaluation
Quality early childhood education (ECE) for 3–5-year-olds, (% of total child population 3–5 years old)	91%	100%	Economic Evaluation
Quality pre-primary education for 5–6-year-olds), (% of total child population 5–6 years old)	73%	100%	Economic Evaluation
Additional supports for children with disabilities	N/A	N/A	Assessment based on literature review and analysis of primary qualitative data collection
Mental health support in ECEC programmes	N/A	N/A	Assessment based on literature review and analysis of primary qualitative data collection

Figure 9. Illustration of Scenarios for Childcare, ECE, and Pre-Primary Education, 2023-2050



The key messages determined from this analysis are depicted in Box 4. The Investment Case makes a persuasive case for investment in ECEC as this is likely to deliver substantial economic and non-economic investments.

Box 4: The Key Messages from the ECEC Section

- The monetary gains that could be achieved through investment into ECEC are substantial. The total economic benefits from the fast scale-up scenario could be as high as UAH 522 billion between 2023 and 2050. The cost of inaction could be as much as UAH 419 billion across the same time horizon.
- The rate of return on investments into ECEC is between 4.3 and 5.1, depending on the speed of the scale up.

[152] The population of children (6 months to two years old) in need of childcare was calculated in line with the methodology used in A. Devercelli and F. Beaton-Day's Better Jobs and Brighter Futures: Investing in Childcare to Build Human Capital (2020, World Bank Group: Washington D.C., USA). It was assumed that the children in need of childcare would be in line with the female labour force participation rate, as all women in the labour force who have children would require some form of care support. The female labour force participation rate in Ukraine was assumed to be 55% (the World Bank reports a rate of 48%, which was increased by 7 percentage points in recognition of the common under-estimation of female labour force participation in official statistics).

- Investments in ECEC are also likely to increase the years of schooling received by each child. The fast scale-up scenario could improve the average years of schooling each child receives by 0.37, taking Ukraine to 13.3 years per child. This would be in line with other European countries, such as Greece and Serbia.
- Investments in ECEC will free up more time for caregivers, mainly women, to return to the labour market. The Investment Case found that, under the fast scale-up scenario, 350,000 caregivers would be able to return to the labour market by 2030 as their children would now be in ECEC settings. This would have a significant impact on female labour force participation due to caregivers mostly being women.
- Finally, investments into ECEC will generate meaningful employment opportunities for Ukrainians, predominantly women. It is estimated that an additional 9,846 (slow scenario) to 16,717 (fast scenario) new staff members would be need annually to match the scale-up needs. The additional staff created would also help increase female labour force participation.
- Ukraine stands to benefit significantly from increased investment into ECEC in both the long- and short-term. A strong ECEC system will help people return to Ukraine and will also ensure that children grow and develop into prosperous working-age adults. The added benefits for female-labour force participation will also encourage families to return, particularly as many of those who have left have been young women with children.

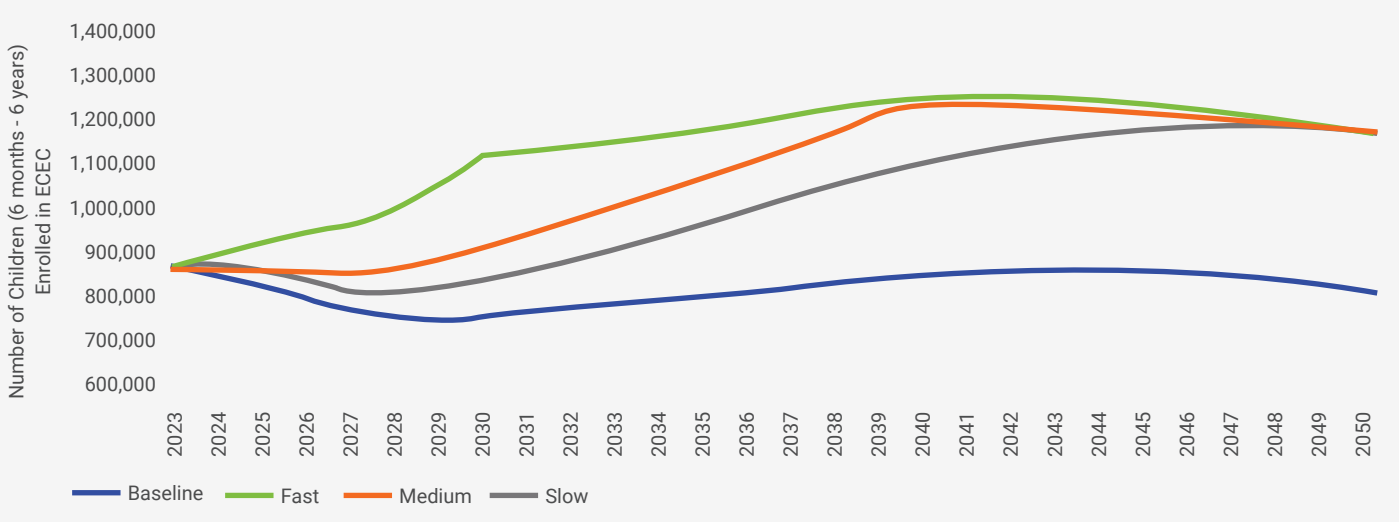
3.1.2 Cost Estimates

3.1.2.1 Methodology

To understand how much it would cost to scale up these services for young children, high level estimates have been developed.

1. The estimations started by calculating how many children would benefit from ECEC services under each scale-up scenario and for each year of the study time horizon. This figure was calculated by multiplying the projected coverage rate for each year, under each scenario, and the projected population of the relevant group.[153] The number of children who would be enrolled under each scenario is illustrated in Figure 11 (the non-linear shape is a result of demographic changes).

Figure 10: Projected Number of Children Enrolled in ECEC Services Under Different Scenarios, 2023-2050



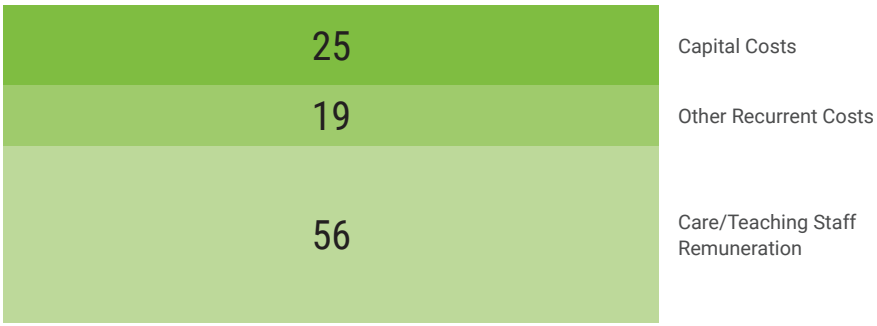
[153] Population estimates for Ukraine, by single year age group, up to 2050 were extracted from: United Nations Department of Economic and Social Affairs Population Division (2023). World Population Projections 2022. https://population.un.org/wpp/

2. Next, the number of care/teaching staff required to provide these services to the population groups in each of these scenarios was estimated. It was assumed that there would be an average child-to-care/teaching staff ratio of 20:1. This figure is an average across all age groups being modelled (in practice, the child-to-care/teaching staff ratio would be lower for younger age groups but might be higher for older age groups).

3. A wage bill associated with the care/teaching staff cohort was then estimated for each year of the study and for each scenario. It was assumed that care/teaching staff would receive total annual remuneration of UAH 112,704 annually, on average, in the baseline year (2023).[154] In subsequent years, this remuneration is assumed to increase in line with inflation.[155]

4. Other inputs required to provide ECEC services were estimated using budget trends analysis. It was assumed that this care/teaching staff remuneration (which covers salaries and benefits) would account for 75% of recurrent spending on ECEC services. The remaining 25% of recurrent spending is on non-care/teaching staff inputs, e.g., the purchase of equipment, teaching materials, food, administration and management, and utilities. It was also assumed that recurrent spending accounts for 75% of total spending, with the other 25% of spending being capital (one-off investments, e.g., building or renovating a classroom). This breakdown of costs – between remuneration, other recurrent spending, and capital investments – is illustrated in Figure 12.

Figure 11: Assumed Breakdown of ECEC System Costs by Renumeration, Other Recurrent Costs, and Capital Costs



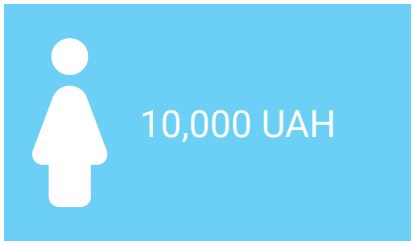
This high-level costing exercise is intended to be indicative. It does not represent an in-detail analysis of costs related to the provision of different types of ECEC programmes (nurseries, kindergartens, short preparatory programmes, etc.) as this is beyond the scope of this assignment. It is recommended that future research into the costs and cost-effectiveness of different ECEC programmes in Ukraine should be undertaken to inform policy making and scale-up strategy design.

3.1.2.2 Methodology

Scaling up quality ECEC to near universal coverage has initial cost implications, but a high return on investment in the longer term. Determining this involves modelling the costs associated with Ukraine increasing coverage of the three key ECEC services listed in Table 11 from current rates to target coverage rates under the three scale-up scenarios (fast, medium, and slow).

The unit cost of providing ECEC services (per child, per year) was estimated. In the baseline year, it was estimated that the per unit cost of ECEC was around UAH 10,000, as illustrated in Figure 13. The costs of providing these services are projected to increase over time, as inflation increases the price of inputs into the system. If costs increase in line with inflation projections, the unit cost (undiscounted) of ECEC services will reach UAH 16,000 by 2030, UAH 26,000 by 2040, and UAH 42,500 by 2050.

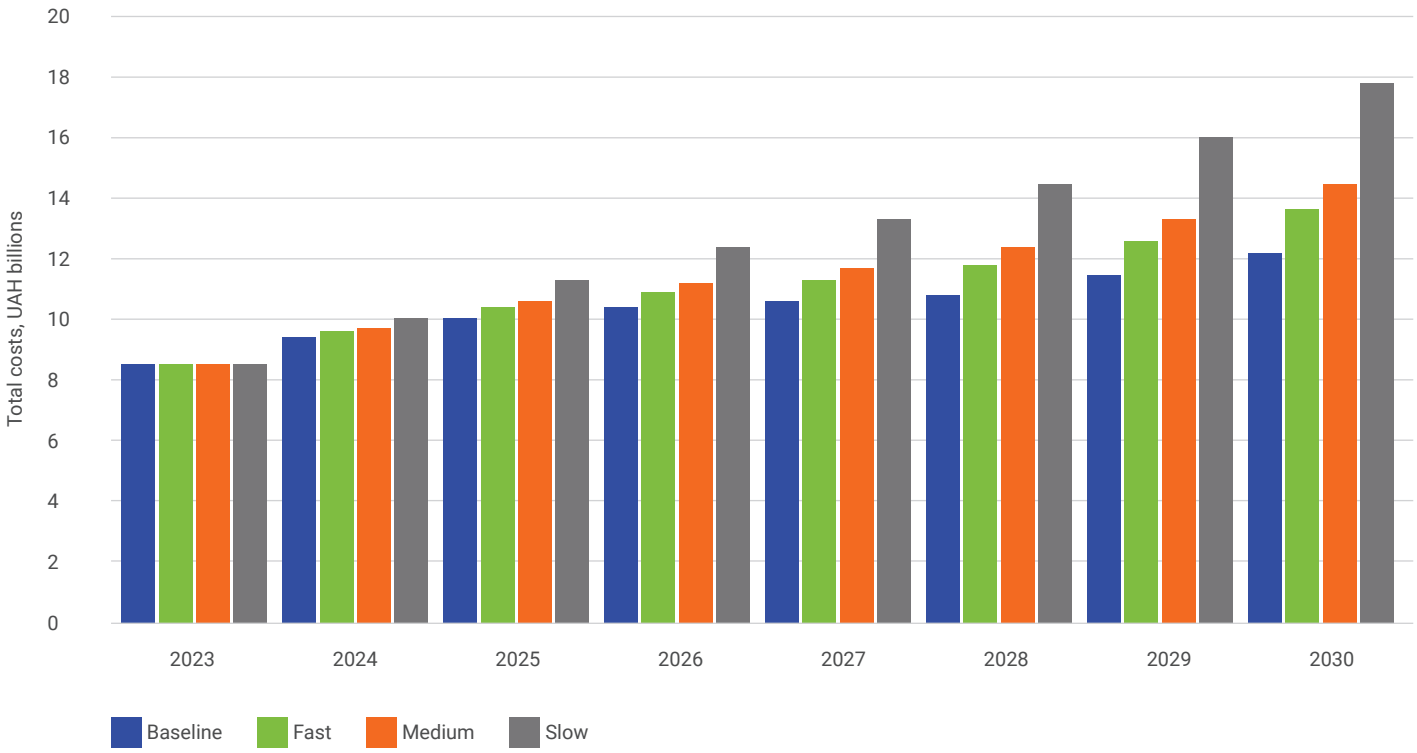
Figure 12: Estimated Per Unit Cost of ECEC in 2023



[154] This figure is listed as the average salary of pedagogical staff in the Management Information Indicators for Education Development in Ukraine (Indicator 18.1 – listed per month, which was multiplied by 12 to obtain an annual estimate).
[155] Inflation projections are taken from International Monetary Fund (IMF) estimates: IMF (2024). Ukraine and the IMF. https://www.imf.org/en/Countries/UKR

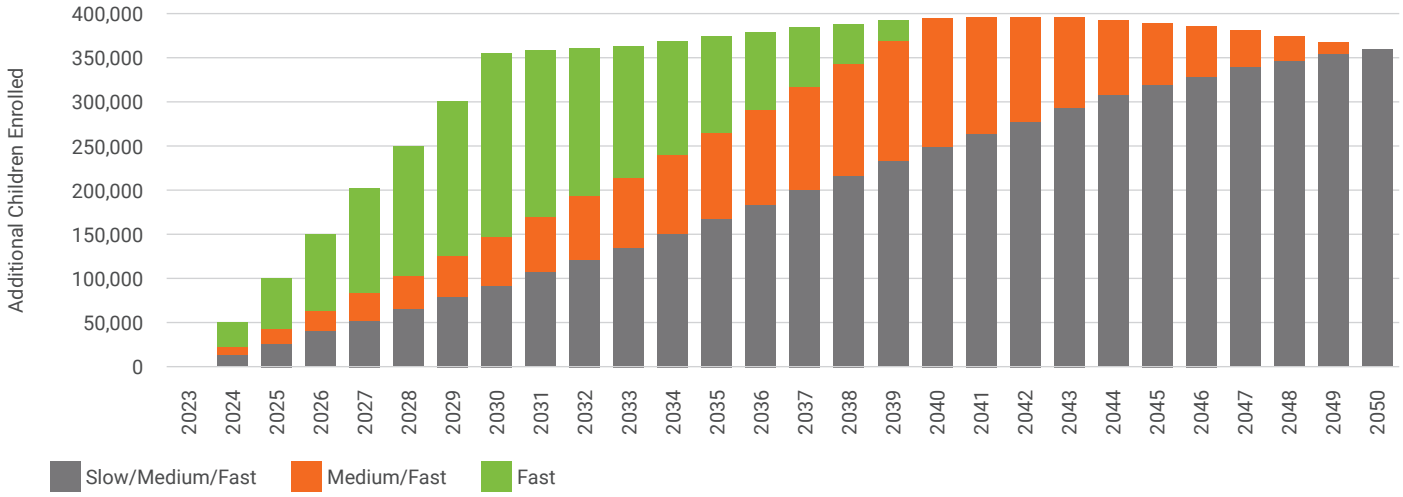
The total costs of providing ECEC services under each scenario were then projected. This accounts for the unit cost and the number of children in ECEC services in each year, for each scenario. These costs (in undiscounted terms) are depicted in Figure 14 for every year to 2030. They are displayed here in undiscounted costs as this can be useful for budget planning and gaining a more accurate understanding of the costs involved. Figure 14 shows that the costs of providing these services are expected to increase under all scenarios (including baseline), as the cost of inputs increases with inflation. Costs are expected to increase from around UAH 9 billion in 2023 to UAH 12 billion in 2030 (under the baseline scenario); however, this increase would be even higher under the scale-up scenarios, as the population covered by these services would grow. This increase would be greatest under the fastest scale-up scenario, where the undiscounted costs in 2030 could reach UAH 18 billion.

Figure 13. Total Undiscounted Annual Costs of Providing ECEC Services Under Each Scenario (Baseline, Slow, Medium, Fast), 2023-2030



The additional costs of providing ECEC services under each scale-up scenario have been calculated. These additional costs are the costs of the scale-up minus the costs of the baseline scenario, i.e., the cost of providing ECEC for children who would not otherwise receive services. The annual number of these additional children for each scenario is depicted in Figure 15 to provide a sense of the cohort of children which also needs to be reached. By 2030, an additional 350,000 children would be receiving services under the fast scenario, compared to an additional 145,000 children in the medium and 90,000 children in the slow scenario.

Figure 14. Additional Children (6 months – 6 years) Enrolled in ECEC Services Under Different Scenarios (Fast, Medium, Slow), 2023-2050



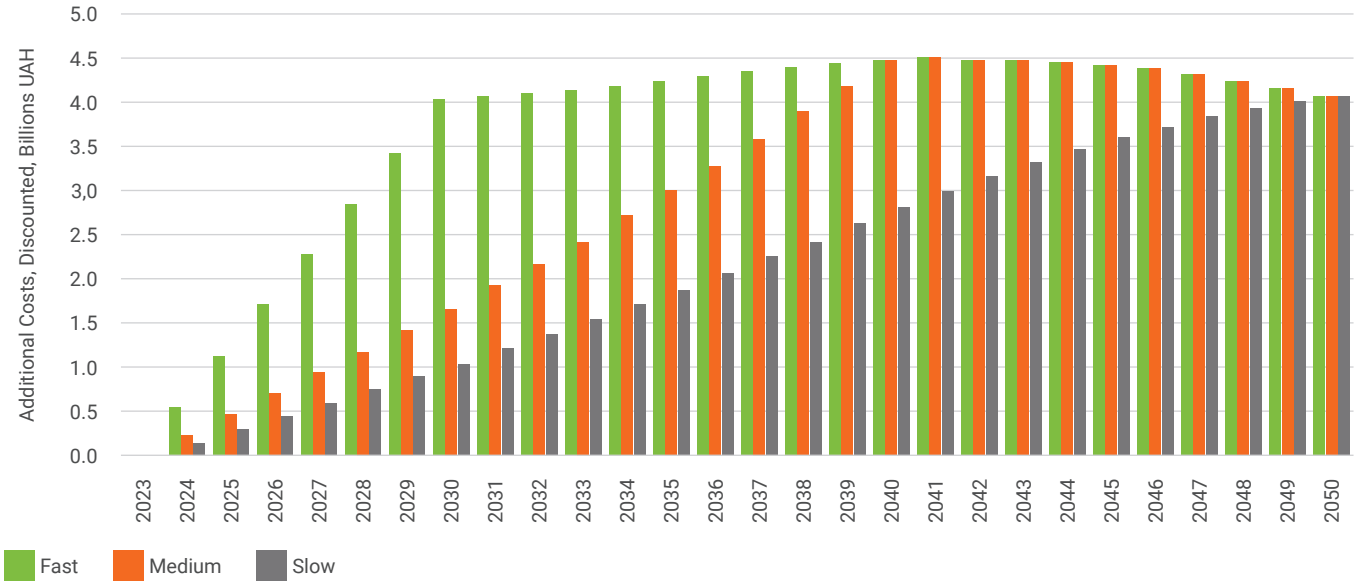
The cost estimates for these ECEC scale-up scenarios are reported in Table 12, which shows the anticipated costs over different time horizons, disaggregated between recurrent and capital costs, and in a discounted form. In the first six years of the scale-up, UAH 4.2 billion would be required under the slow scenario. This would be higher under the faster, more ambitious scenarios; in the fast scenario around UAH 16.0 billion will be required, compared to UAH 6.6 billion in the medium scenario. The difference in these cost estimates is a result of the different speeds of the scale up – with the fast scenario hitting targets by 2030. Many more classrooms and facilities need to be built, ECEC teachers or caregivers to be trained, and salaries to be paid. Notably, the capital costs for the fast scenario would be particularly high in the first six years, before reducing and plateauing after this time. Capital costs would be required in order to meet additional demand, and to replace or renovate existing infrastructure. Under the slower scenarios, these capital costs are much more evenly spread. This is because of the longer-term horizon of the scale-up.

Table 12: Additional Costs of Fast, Medium, and Slow Scale-up Scenarios over Different Time Horizons, in UAH Billions, Discounted at 5%

	2023-2030	2031-2040	2041-2050	2023-2050
Fast				
Recurrent costs	12.0	32.2	32.8	77.0
Capital costs	4.0	10.7	10.9	25.7
Total	16.0	42.9	43.8	102.7
Medium				
Recurrent costs	4.9	23.8	32.8	61.6
Capital costs	1.6	7.9	10.9	20.5
Total	6.6	31.8	43.8	82.2
Slow				
Recurrent costs	3.1	15.0	27.3	45.4
Capital costs	1.0	5.0	9.1	15.1
Total	4.2	20.0	36.4	60.5

Additional costs can be further disaggregated into the annual amount required to fund a scale-up. Figure 15 depicts these additional costs for each scale-up scenario, in discounted terms, for each year of the study time horizon. These discounted annual additional costs would be expected to amount to an average of UAH 2.3 billion under the slow scale-up scenario, UAH 3.2 billion in the medium scenario, and UAH 4.0 billion in the fast scenario.

Figure 15: Additional Annual Costs to Scale-up ECEC Under Each Scale-Up Scenario (Fast, Medium, Slow), 2023-2050, in UAH Billions, Discounted at 5%



To reiterate, these are high-level estimates; conducting more detailed costing and cost-effectiveness exercises of ECEC programmes is an important activity for next steps. This process should explore ways to increase efficiencies in how ECEC budgets are used (without jeopardising quality). These kinds of cost-effectiveness and efficiency analyses of ECEC would provide critical evidence on how to maximise outcomes for children within constrained fiscal contexts. With changes to service delivery, it may be that quality ECEC can be provided at lower cost than that assumed in this study.

3.1.3 Benefits

ECEC stands out as one of the most effective methods of enhancing children's learning outcomes and, therefore, their long-term productivity and earnings. Providing children with opportunities to engage in early learning can stimulate their cognitive, socio-emotional, linguistic, and motor development.[156] Empirical studies from a wide range of global contexts illustrate that access to quality ECEC is linked with significant improvements in long-term outcomes for children, including improving their: school readiness; propensity to learn and engage, to remain in and progress through the school system, and; ability to achieve better results (e.g., graduation rates, better grades). In turn, increasing educational attainment can lead to significant economic gains. Studies show that extending years of education is linked to enhanced productivity and greater lifetime earning potential; individuals with higher levels of education (which can be the result of ECE attendance) are more likely to be able to compete for well-paying, skilled (formal) jobs often in higher rent economic sectors. In Ukraine, it is estimated that each additional year of education is equivalent to a 6.3% increase in lifetime earnings.[157]

3.1.3.1 Methodology

Given available evidence, it was possible to estimate the benefits accruing to Ukraine from scaling up quality ECEC through three impact pathways:

1. **Better education outcomes:** As noted above, ECEC is linked with improved lifelong learning outcomes. Children who benefit are likely to have better quality and quantity of education. This impact estimate was based on a robust recent analysis using a large data set, and was used to inform the model design. The impact pathway could then be monetised by estimating how ECEC is expected to increase the years of schooling per child, based on global evidence.[158] In turn, this increase in the quantity of education children achieve is monetised as a productivity gain or lifelong earning boost.

[156] UNICEF, Education Commission, The LEGO Foundation (2022). Add Today, Multiply Tomorrow: Building an Investment Case for Early Childhood Education.
[157] Peet, E. D., Fink, G., and Fawzi, W. (2015). Returns to Education in Developing Countries: Evidence from the Living Standards and Measurement Study Surveys. Economics of Education Review, 49, 69-90.
[158] Ibid.

2. **Reduced unpaid care work and female economic empowerment:** If access to ECEC is improved, parents or caregivers (usually women) will likely have a reduced unpaid care load.[159] Thus, these parents/caregivers would be able to invest that time in other activities, including in the labour market and economy, contributing to growth, development, and female economic empowerment.

3. **Meaningful job opportunities:** Scaling up ECEC would require a quality workforce to deliver these services. ECEC provides a meaningful and rewarding career opportunity and, given that most of the care and early years teachers globally are women, it also has the potential to support female economic empowerment. This investment in ECEC, therefore, should also benefit those who would profit from new employment opportunities opening.[160]

The results of the modelling of each of these impact pathways are discussed in turn below.

3.1.3.2 Findings: Better Education Outcomes

Scaling up quality ECEC is expected to improve long-term educational outcomes. Quality early educational opportunities prepare children for learning within a school environment. Compared to most home environments, quality ECEC exposes children to more structured play, encourages their engagement with peers, and equips them to manage the structure and discipline in a classroom. Studies routinely find that children who have had access to ECEC are better prepared for learning.[161] As a result, children are more likely to stay longer in school, produce better results, and complete higher levels of education. These benefits, however, will only be felt if the education provided is of high quality. Low-quality or a lack of ECE can harm children's overall social, emotional, educational, and physical wellbeing, with long-term impacts.

These trends are well reported in literature. There is much research into this issue, especially in Organisation for Economic Cooperation and Development (OECD) countries, highlighting a link between exposure to quality ECEC and long-term educational attainment.[162] Often, these improvements in long-term education outcomes are measured in terms of years of schooling, which is a metric for the expected number of years a child will be in a school system in a given location or time. This figure is a proxy for educational outcomes and is correlated with improved harmonised test results and graduation from higher education levels.

Box 5. Snapshot from Literature: The Impact of ECEC on Learning Outcomes

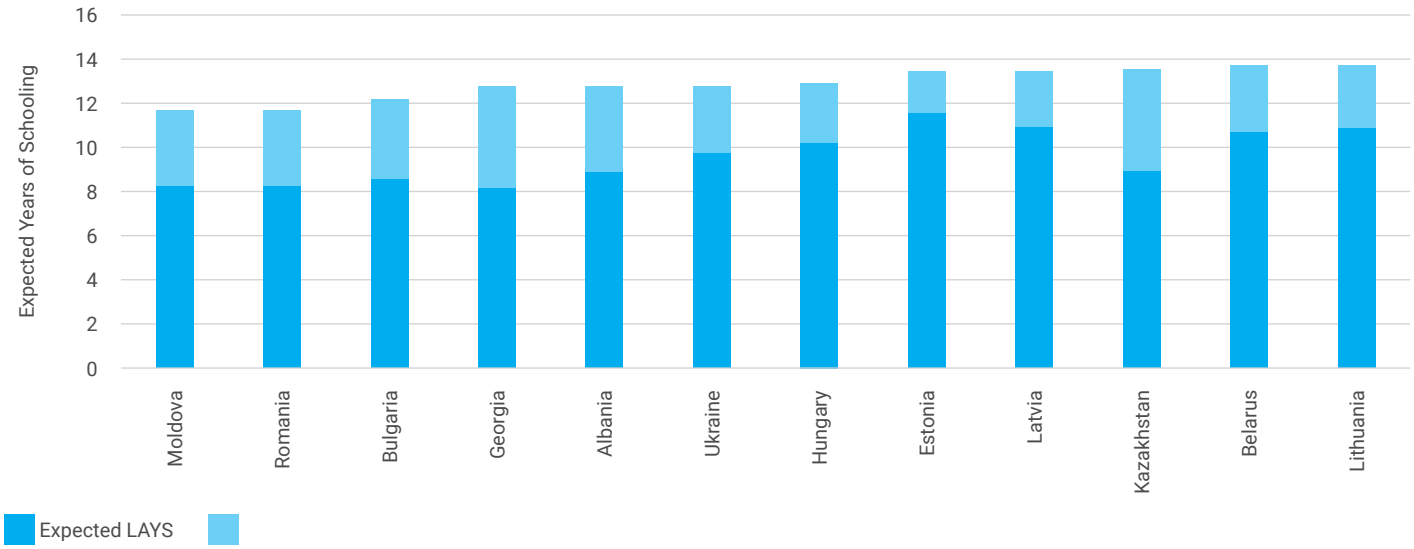
In **Uruguay**, analysis of household survey data found that a rapid expansion in preschool services had supported better educational outcomes for children.[163] The small gains from preschool attendance at a young age were found to magnify throughout the child's life. By the age of 15, children who had been exposed to pre-primary education had accumulated an additional 0.8 extra years of education compared to those without.[164]

A separate analysis of the relationship between pre-primary education and long-term outcomes in **12 low- and middle-income countries** found positive and statistically significant associations with post-pre-primary education attainment.[165] Across the sample set, children exposed to pre-primary education were expected to have an average (mean) additional 0.9 years of schooling.[166] This association was particularly strong in lower-middle income countries.

[159] Devercelli, A. and Beaton-Day, F. (2020). Better Jobs and Brighter Futures: Investing in Childcare to Build Human Capital, (World Bank Group: Washington D.C., USA).
[160] Result is dependent on jobs in care and early learning sector being adequately rewarded and respected, including through remuneration.
[161] UNICEF (2019). Global Report. A World Ready to Learn.
[162] Heckman, J., Moon, S., Pinto, R. et al. (2010). A New Cost Benefit and Rate of Return Analysis for the Perry Preschool Program: A Summary, Working Paper Series No. 16180, (National Bureau of Economic Research, USA); Reynolds, A., Temple, J., Ou, S. et al. (2011). School-Based Early Childhood Education and Age-28 Wellbeing: Effects of Timing, Dosage and Subgroups, Science, 333(6040), 360-364; Barnett, W. and Masse, L. (2007). Comparative Benefit-Cost Analysis of the Abecedarian Program and its Policy Implications, Economics of Education Review, 26, 113-125; Sylva, K., Melhuish, E. and Sammons, P. (2011). Pre-School Quality and Educational Outcomes at Age 11: Low Quality has Little Benefit, Journal of Early Childhood Research, 9(2), 109-124.
[163] S. Berlinksi, S. Galiani and M. Manacorda (2008). 'Giving Children A Better Start: Preschool Attendance and School-Age Profiles', Journal of Public Economics, 92(5), 1416-1440.
[164] Ibid.
[165] Shafiq M., Devercelli, A. and Valerio, A. (2018). Are There Long-Term Benefits from Early Childhood Education in Low- and Middle-Income Countries?, Education Policy Analysis Archives, 26, 122.
[166] Ibid.

In Ukraine, education outcomes are already good compared to regional and income group peers. According to the latest World Bank Human Capital data, students in Ukraine scored 478 (on a scale where 625 represents advanced attainment and 300 represents minimum attainment).[167] Notably, this data is from before the full-scale war began in Ukraine in 2022. It is likely that the war has negatively affected outcomes. These figures, however, were higher than other lower-middle income countries in the Europe and Central Asia region (e.g., 391 in Tajikistan, 420 in the Kyrgyz Republic, 474 in Uzbekistan) and is even above many higher income level countries (e.g., Romania or Serbia, which have harmonised test scores of 442 and 457, respectively).[168] Ukraine also performed well on the expected years of schooling metric – at 12.9 years per child in 2020. This number compares closely to countries in the region, such as Hungary or Albania.[169] When the quality of learning taking place is accounted for (in the LAYS metric), Ukraine continues to perform. Children are expected to have 9.9 LAYS in Ukraine, compared to 8.7 in Bulgaria or 10.8 in Belarus.[170]

Figure 16: Expected Years of Schooling in Ukraine and Across Peer Countries, 2020[171]



Scaling up quality ECEC can help Ukraine maintain these impressive education outcomes, which will likely have been negatively affected by the war. Modelling of the impact of scaling up quality ECEC services suggests that the expected years of schooling in Ukraine could increase by an additional 0.37 years per child. This would take Ukraine to 13.3 years, equivalent to countries such as Greece or Serbia.[172] This gain would be expected to occur under all three of the scale-up scenarios (fast, medium, and slow); the only difference would be the speed at which Ukraine would be expected to make these improvements (with the fast scenario leading to a quicker improvement in the years of schooling).

This improvement in learning outcomes would be expected to increase children's lifetime earning potential. Given the estimated rate of return of a year's education in Ukraine, it was estimated that a scale-up of ECEC could lead to a 2.3% boost in lifetime earnings for children who benefit. To give a sense of the size of this benefit, consider that a child in 2023 is estimated to have lifetime earnings potential of around UAH 17 million (in discounted terms); the impact of ECEC, therefore, would equate to around UAH 400,000.

[167] The World Bank (2020). The 2020 HCI: Visualization. https://www.worldbank.org/en/publication/human-capital#Index
[168] Ibid.
[169] Ibid.
[170] Ibid.
[171] Ibid.
[172] Ibid.

Box 6. Methodology Synopsis

The impact of ECEC on years of schooling was estimated by drawing on evidence from a recent UNICEF Innocenti meta-study. This study analysed data from 109 low- and middle-income countries and found that, for every 10% increase in pre-primary education, there was a 0.14% increase in the average years of schooling for the population (because of the strong impacts on child development, socialisation, and school readiness).[173] This impact size was applied to each scale-up scenario to model how increasing enrolment in pre-primary education (for 5-6 year olds) might impact the years of schooling.

Next, this increase in the years of schooling was monetised. An estimate of expected lifetime earning was calculated by multiplying the gross national income (GNI) per capita by the estimated number of years that a person spends in the labour force. This figure was adjusted to account for economic growth and inflation, and was discounted. This estimate of lifetime earnings was multiplied by the additional number of years of schooling because of the intervention (as described above) and the rate of return of a year's education to calculate the monetary impact per child across the scale up. This figure was then multiplied by the number of children benefitting from the intervention in each scenario.

3.1.3.3 Findings: Reduced Unpaid Care Work and Female Economic Empowerment

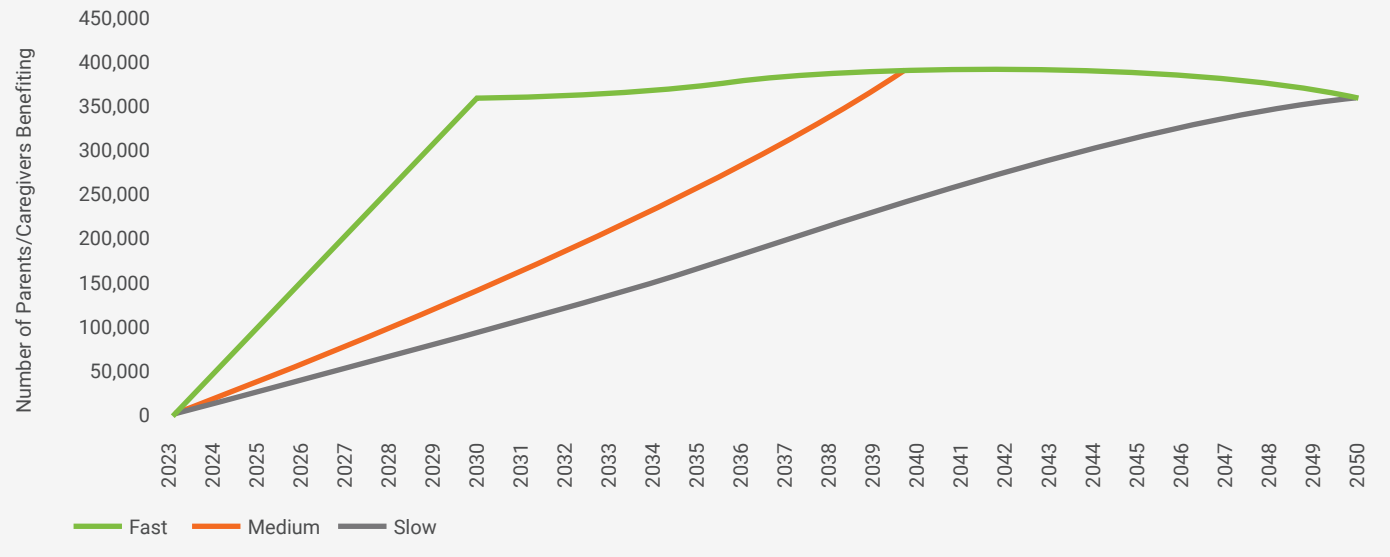
Caring for young children is one of the largest components of unpaid care work globally, including in Ukraine.[174] Recent data suggest that women in Ukraine spend more than twice as much time as men on unpaid household work, which includes caring for children. These disparities are particularly high in rural areas.[175] This high unpaid care work burden has limited women's opportunities and career prospects, including their access to senior positions; as of January 2021, women in Ukraine headed less than a third of all legal entities and only one-fifth of farms.[176] Lack of quality, affordable childcare options (particularly for children under 3) is a significant contributor to this high burden of unpaid care work and the subsequent challenges women face in the workforce. Research shows that introducing childcare initiatives can impact women's work outside of the home.[177] Providing a safe, nurturing care environment for all children has the potential to open opportunities for women, support their human capital creation, and contribute to a more gender equal society. This is especially important in the context of the ongoing war. As the country faces labour shortages, women are simultaneously facing significant increases in unpaid care work and being drawn upon for employment and volunteer work.[178]

The impact of scaling up ECEC coverage for children 6 months to 6 years old on parents/caregivers has been modelled. The modelling found that, each year, a parent/caregiver could save 645 hours by having their child in an ECEC programme (the equivalent of 27 days, or almost an entire month). If parents/caregivers spent just half of this time on income-generating activities, they would gain more than 13 working days per year. The monetary value of this income-generating time could equate to UAH 17,500 annually, per child enrolled. Given trends in the distribution of unpaid care work, this 'freed up' time and additional income-generating potential would have the greatest impact on women.

These positive impacts would be felt in all three scale-up scenarios; however, the faster the scale-up, the more parents/caregivers who would benefit. Figure 17 depicts the additional number of parents/caregivers who would benefit under each scenario (fast, medium, and slow) because of the ECEC scale-up. Over 350,000 people (mostly women) could be benefitting from the intervention by 2030 (under the fast scenario).

[173] Muroga, A., Zaw, H., Mizunoya, S. et al. (2020). COVID-19: A Reason to Double Down on Investments in Pre-Primary Education, Innocenti Working Paper WP-2020-11, (UNICEF Office of Research: Florence, Italy).
[174] Charmes, J. (2019). Unpaid Care Work and the Labor Market: An Analysis of Time Use Data Based on The Latest World Compilation of Time-Use Surveys, (Geneva: ILO).
[175] UN Women (2021). Indicators for the Monitoring of Gender Equality in Ukraine.
[176] Ibid.
[177] Hojman, A. and Boo, F. (2022). Public Childcare Benefits Children and Mothers: Evidence from a Nationwide Experiment in a Developing Country, Journal of Public Economics, 212, 104686; Fink, G., McCoy, D., and Hatamleh, H. (2017). Economic Implications of Investing in Early Childhood Care and Education in Jordan, Queen Rania Foundation, Working Paper.
[178] UN Women and Care International (2022). Rapid Gender Analysis of Ukraine, (UN Women and Care International: Kyiv, Ukraine).

Figure 17. Number of Additional Parents/Caregivers Benefiting from ECEC Services Under Fast, Medium, and Slow Scenarios, 2023-2050.[179]



Box 7. Methodology Synopsis

Modelling assumes that each additional child (6 months to 6 years old) benefitting from ECEC services would otherwise be cared for by a single adult (parent/caregiver). This is an average; some children may indeed have more than one adult caring for them, or one adult may be taking care of more than one child under the age of 6. The number of parents/caregivers benefitting from the intervention was calculated for each year under the scale-up scenarios on this basis.

It was assumed that parents/caregivers could 'free up' 15 hours per week because of ECEC services – equivalent to 3 hours per day – and that services would run 43 weeks a year. It was also assumed that only half of this 'freed up' time would be put to income-generating work, thus accounting for time put to other activities (e.g., household work, leisure activities). The baseline hourly wage estimate was calculated based on the GNI per capita in the base year and, in subsequent years, was increased in line with inflation.

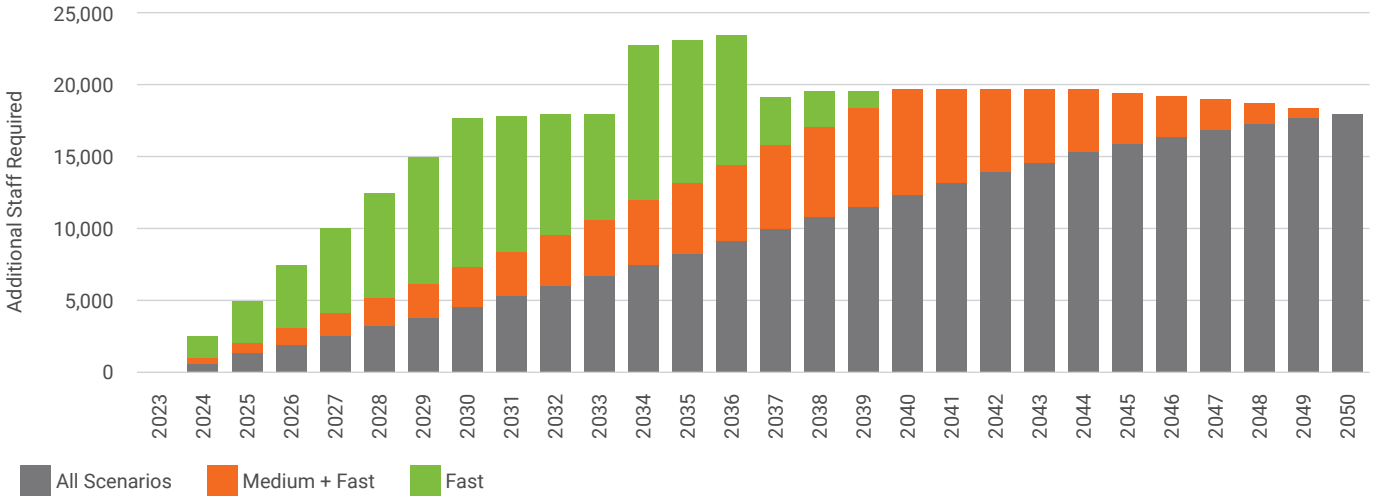
It is likely that this approach underestimates the value of ECEC to women's economic empowerment. It does not account for the career progression that may be made possible if women were better able to stay in the workforce while raising young children. In this approach, only the increase in the time spent working has been accounted for, rather than any subsequent improvements to wages themselves (because of longevity and experience in a career).

3.1.3.4 Findings: Meaningful Employment Opportunities in ECEC

Finally, scaling up ECEC services would necessitate the employment of additional staff. As such, investment provides the opportunity for significant employment creation in work which can be meaningful and rewarding. This job creation could constitute valuable work opportunities for young people and could foster youth participation in efforts to rebuild and recover after the war. Moreover, this creation also offers significant potential for increasing female employment opportunities as staff in ECE centres, and primary schools are almost exclusively female staffed in Ukraine.[180] As shown in the figure below, scaling up ECEC coverage in line with the scenarios modelled in this study would require a significant increase in the workforce. In 2024, an estimated additional 660 staff would be required in the slow scenario, just over 1,000 in the medium scenario, and to over 2,500 in the fast scenario. These additional staff numbers would continue to grow, as shown in Figure 18. On average, an additional 9,846 (slow scenario) to 16,717 (fast scenario) staff would be required annually between 2024 and 2050. This growth in employment would be associated with economic opportunities on an individual level. It would also be expected to benefit families and households, as well as local communities, as workers invest in more goods and services (including, for example, more nutritious food for their families). Further, it would also increase tax revenues (through income and consumption taxes) which would benefit the government's fiscal space.

[180] Martin, N., and Tijdens, M. (2010). An Overview of Women's Work and Employment in Ukraine, accessed: 27 March 2024. https://www.ituc-csi.org/IMG/pdf/Country_Report_No8-Ukraine_EN.pdf.

Figure 18: Additional ECEC Staff Required in Fast, Medium, and Slow Scale-up Scenarios, (2023-2050).[181]



Box 8. Methodology Synopsis

The number of additional care and teaching staff required to facilitate these scale-ups in ECEC services was calculated by dividing the number of additional children enrolled (in each year, for each scenario) by an average child:staff ratio of 20:1. Annual renumeration for these staff members was assumed to be UAH 112,704, on average, in the base year.[182] This renumeration was assumed to increase in following years in line with inflation.

3.1.3.5 Findings: Benefits of Inclusive Education

Please note: the benefits of inclusive education were analysed through a desk-based review. They are not included in the monetary benefits or the economic evaluation. Inclusive education was not included in economic evaluation due to a lack of long-term, numerical evidence on the benefits.

Inclusive education means giving all children the chance to learn together, regardless of differences in background, opportunity, or ability. It is often one of the most effective ways to give all children a fair chance to go to school, learn, and develop the skills they need to thrive.[183] Thus, it is a crucial aspect of providing quality ECE, ensuring that all children have the support they need to learn together. It is also an important factor in reducing institutionalisation as inclusive education helps to ensure that children have the support they need to thrive in school and at home. Developing inclusive education systems has significant benefits for all children, not just those who may need additional support.

Box 9. Inclusive Education[184]

Inclusive education means all children in the same classrooms, in the same schools. It means real learning opportunities for groups who have traditionally been excluded - not only children with disabilities, but speakers of minority languages, internally displaced children, and refugee children.

Inclusive systems allow diverse groups of children to grow side by side to the benefit of all.

This section examines inclusive education for children with disabilities and internally displaced children in Ukraine. They are not, however, the only vulnerable children. Roma children are a traditionally marginalised group that are often excluded from mainstream education. Roma children face numerous obstacles, including difficulty accessing social benefits and education due to an inability to gain formal identification.[185] In some communities, there is a history of seg-

[181] This is the additional number of staff for each year compared to the baseline, rather than the hiring needs for each year.
[182] The average salary of pedagogical staff listed in the Set of Management Information Indicators for Education Development. Indicator 18.1.
[183] UNICEF (n.d.). Inclusive Education, accessed: 04 April 2024. https://www.unicef.org/education/inclusive-education
[184] Ibid.
[185] Oxfam (2023). Further into The Margins: A Regional Report on Roma Communities Displaced by the Ukraine Crisis, accessed: 30 April 2024. https://reliefweb.int/report/ukraine/further-margins-regional-report-roma-communities-displaced-ukraine-crisis

regated education, where Roma children have been forced to study separately.[186] The escalation of the war in 2022 has exacerbated these challenges, as Roma children are less likely to have access to technology to study online.[187] Meanwhile, gaining identification has become more challenging due to the disruption caused to systems and infrastructure.[188] Education outcomes were lower for Roma children before the war and these challenges have increased education inequities. Additional support for Roma children in ECEC centres is essential to navigate and respect cultural differences.[189] It should be noted that the need for inclusive education is substantial and impacts all children.

3.1.3.5.1 Inclusive Education System in Ukraine

The inclusive education system in Ukraine is underpinned by the Constitution of Ukraine, which articulates the provision of equal rights and opportunities for all.[190] The 2017 Law of Education guarantees all children the right to education.[191] The law specifies that this right is a given, regardless of health, disability, nationality, or language of communication.[192] Ukraine has also ratified several key conventions, such as the UN Convention of the Rights of Persons with Disabilities, that determine the full and effective involvement and inclusion of persons with disabilities into all avenues of public life.[193] Despite this, certain pieces of Ukrainian legislation focus on providing children with separate education. The Law of Ukraine on Childhood Protection states that education for children with disabilities should be provided in educational institutions, rather than mainstream preschool facilities.[194] Article 12 of the Law of Ukraine on Preschool Education provides children with disabilities up to eight years of preschool education in specific centres.[195] Moreover, much of the legal landscape is focused on children with disabilities, rather than other crucial aspects of inclusive education, such as gender, internal displacement, or mental health.

Ukraine has comprehensive procedures in place to organise inclusive education in preschools. In 2019, the government passed the resolution 'on the approval of the procedure for the organization of inclusive education in preschool education institutions'.[196] This resolution involves assessments of institutional capacity to provide ECEC for children with special educational needs, the creation of teams who can provide psychological and pedagogical support, and continuous monitoring of the inclusive education being provided.[197] However, the changes required to make ECEC 'inclusive' appear to only happen once a child with special educational needs wants to join a preschool; staff members with psychological training and inclusive development programmes are not in place in all ECEC centres. This, coupled with the fact that local governments are required to pay for inclusive education requirements, means that enrolling children with special educational needs into mainstream ECEC centres has been challenging.

According to a 2019 resolution, the financing of inclusive activities is carried out by local budgets and State subventions.[198] Local budgets are responsible for ensuring the creation of inclusive education within a preschool, including the materials required, the technical and educational base, and any changes to infrastructure.[199] Payments for additional classes required for certain students is paid for by subvention funds from the State budget to the local budget as part of State support for people with special needs.[200] The different needs of individual children significantly impacts the level of support that is required, as does the number of children who need additional support. The significant responsibility placed on local governments to fund inclusive education could impact the quality of inclusive education provided across the country, especially considering some oblasts are able to generate more additional revenue than others. It is also likely that the prioritisation of inclusive education differs regionally.

[186] European Roma Rights Center (2007). Challenging Segregated Education of Roma in Ukraine, accessed: 30 April 2024. https://www.errc.org/roma-rights-journal/challenging-segregated-education-of-roma-in-ukraine
[187] Oxfam (2023). Further into The Margins: A Regional Report on Roma Communities Displaced by the Ukraine Crisis, accessed: 30 April 2024. https://reliefweb.int/report/ukraine/further-margins-regional-report-roma-communities-displaced-ukraine-crisis
[188] Ibid.
[189] CERI (2023). Roma Families' Struggle for Education, accessed: 30 April 2024. https://cerikids.org/roma-refugee-family/
[190] Lytovchenko, S.V., et al. (n.d.). Preschool Education in Ukraine.
[191] Ibid.
[192] Ibid.
[193] Ibid.
[194] Ibid.
[195] Ibid.
[196] Legislation of Ukraine (2019). On The Approval of The Procedure for The Organization of Inclusive Education in Preschool Education Institutions, accessed: 04 April 2024. https://zakon.rada.gov.ua/laws/show/530-2019-%D0%BF#Text
[197] Ibid.
[198] Ibid.
[199] Lytovchenko, S., et al. (n.d.). Preschool Education in Ukraine.
[200] Ibid.

3.1.3.5.2 Children with Disabilities

Ukraine's inclusive education landscape focuses predominantly on providing ECEC to children with disabilities. This is important given the number of children with disabilities in Ukraine. According to State Statistics, there are nearly 164,000 children with disabilities, although the actual numbers are expected to be as much as four times higher.[201] This discrepancy is largely due to an inability to assess all children. For children with disabilities, exclusion can start at birth and continue throughout their lifetime. Research shows that exclusion and developmental delays often emerge early in childhood if support needs are not addressed, leading to widening disadvantage and inequities over time. In Ukraine, this often leads to children being segregated from their families and societies in orphanages, institutions, or psychiatric facilities. In 2022, it was estimated that half of all children living in institutions were children with disabilities.[202] In 2021, it was decided that children with severe disabilities should be excluded from Ukraine's deinstitutionalisation process due to challenges with providing care.[203]

In emergency contexts, children with disabilities face additional risks as more vulnerable populations. Children with disabilities in Ukraine are likely to be affected by disruption of the existing early childhood education system, displacement of students and educators, risk of institutionalisation, and destruction of infrastructure resulting from the ongoing war, putting them at higher risk of exclusion from appropriate support structures. Parents and families of children with disabilities may experience increased psychosocial stress and financial stress, and struggle to seek adequate support and learning opportunities for their children.[204]

Ensuring children have access to mainstream ECEC is essential for their long-term development. For children with disabilities, inclusion in ECEC enables full participation, learning, and social development during the critical early years.[205] Extensive evidence shows this inclusion leads to enhanced outcomes across cognitive, language, literacy, physical, behavioural, and socioemotional domains that may not occur in segregated setting.[206] Children with disabilities in inclusive classrooms display more advanced communication, greater literacy and math skills, more positive behaviour, higher academic achievement, and improved self-esteem compared to separate provision.[207] In Ukraine, providing strong, inclusive education is imperative to prevent children from falling into institutionalisation. A key reason for children ending up in institutional care is often because their families do not have the support required to care for them. Inclusive education should be part of a comprehensive package of services, along with parenting programmes, home visiting programmes, and early intervention support, to ensure that families have the support they need to keep children in family-based care.

For children without disabilities, inclusive ECEC cultivates positive attitudes, understanding of diversity, and responsiveness towards classmates with disabilities.[208] Children without disabilities demonstrate greater compassion and empathy, and have a more positive perception of children with disabilities when peer interactions are adequately supported by classroom teachers; they are also more likely to develop a better conceptual understanding of diversity and inclusion. Providing high-quality inclusion represents a cost-effective approach to achieve optimal outcomes for all, versus segregated systems, given its benefits for all children regardless of disability.[209]

Ukraine has made considerable progress in developing an inclusive education system for children with disabilities. The study team visited several mainstream ECEC centres in Chernihiv. Two of these centres have children with disabilities enrolled in their schools. Horodnyansky nursery noted that nine students with disabilities receive speech therapy and psychological support, when required.[210] Another nursery noted that their staff had received advanced training to sup-

[201] Kharkiv Institute of Social Research and others (2023). Rights of Persons with Disabilities During the War in Ukraine.
[202] Martin, B. and Buchanan, J. (2022). Impacts of the Ukraine Invasion for Persons with Disabilities and Priority Entry Points in Humanitarian Response, accessed: 04 April 2024. https://www.sddirect.org.uk/sites/default/files/2022-07/Disability%20Inclusion%20Helpdesk%20Query%2079%20-%20Ukraine%20Invasion.pdf
[203] Sanden, F. (2022). Disabled Children and the War Against Ukraine, accessed: 04 April 2024. https://www.euractiv.com/section/justice-home-affairs/opinion/disabled-children-and-the-war-against-ukraine/.
[204] Goudie et al. (2014). Financial and Psychological Stressors Associated with Caring for Children with Disability.
[205] Strain, P., and Bovey, E. (2011). Randomized, Controlled Trial of The LEAP Model of Early Intervention for Young Children with Autism Spectrum Disorders.
[206] Green, K., Terry, N., and Gallagher, P. (2014). Progress in Language and Literacy Skills Among Children with Disabilities in Inclusive Early Reading First Classrooms.
[207] Rafferty, Y., Piscitelli, V., and Boettcher, C. (2003). The Impact of Inclusion on Language Development and Social Competence among Preschoolers with Disabilities.
[208] Warren, S.R., Martinez, R.S., and Sortino, L.A. (2016). Exploring the Quality Indicators of a Successful Full-Inclusion Preschool Program.
[209] Albanian Disability Rights Foundation (2005). Steps Toward Inclusion: Persons with Disabilities in Albania.
[210] Interviews with Horodnyansky Nursery Acting Director. Carried out by P4EC, December 2023.

port children with disabilities at the Chernihiv Regional Institute for Training and Retraining of Teachers.[211] Promisingly, kindergartens without children with disabilities did have things in place to ensure that education can be provided to all children.[212] That is, children with disabilities would be able to immediately enrol in these schools. The number of children with disabilities able to receive high quality education in mainstream ECEC centres have increased over six times in recent years.[213]

Box 10: Support for Children with Disabilities in ECEC Centres[214]

> A speech therapist and a practical psychologist work with the children… The staff undergoes advanced training at the Chernihiv Regional Institute for Training and Retraining of Teachers.
>
> *Acting Director, Horodnyansky Nursery*

Despite these gains, many children are still receiving care in institutions or specialised ECEC centres. As of 2022, Ukraine has over 2,000 preschools that are specifically designed for children with disabilities, and 627 inclusive resource centres.[215] Disruption caused by the war has damaged infrastructure and services, exacerbating risks.[216] Rebuilding an inclusive, quality ECEC system is thus key to upholding rights for children with disabilities amidst and after the war. A recent study conducted by Disability Rights International (DRI) found that 24.2% of children with disabilities had access to kindergarten, and 32.6% were attending a ECEC centre specifically for children with disabilities.[217] In comparison, only 36.3% of children have access to a State-run ECEC where they will are given the opportunity to interact with all other children.[218] In addition to the long-term developmental impacts children may experience, reducing access to mainstream ECEC centres for children with disabilities increases the likelihood that they may end up in institutional care due to a lack of support for their families.

Box 11: Caregiver Experiences with ECEC for Children with Disabilities[219]

> A State-run kindergarten did not want to take us because of the disability, and there was no special-needs kindergarten in our area.
>
> *Parent, Zaporizhia Region*

Returns on investing in inclusive ECEC and education for children with disabilities are 2-3 times higher than for non-disabled populations.[220] Early inclusion is a particularly impactful intervention from a long-term perspective, given its benefits are incurred throughout life. Inclusion predicts better employment, earnings, and poverty reduction later in life for people with disabilities, with each year of inclusive education decreasing their likelihood of living in poverty by 2-5 percentage points.[221] Early inclusion can therefore lay the groundwork for lifelong inclusion, participation, and social cohesion. The benefits of investing in inclusive education do not just impact children with disabilities, but society as a whole. Estimates from the World Bank found that investing in inclusive education could amount annually to EUR 3.4 – 9.9 billion across Central and Eastern Europe.[222] This investment does require financial commitment; it is estimated that the costs of inclusive education are 2.5 times higher per capita than mainstream education.[223] However, cost savings can be made by improving the inclusivity at mainstream schools. Research suggests it can be 11% cheaper to educate children in mainstream schools, rather than in separate facilities.[224]

[211] Ibid.
[212] Ibid.
[213] Ministry of Education and Science of Ukraine (2022). Inclusive Education in Ukraine.
[214] Interviews with Horodnyansky Nursery Acting Director. Carried out by P4EC, December 2023.
[215] Ministry of Education and Science of Ukraine (2022). Inclusive Resource Centers in Ukraine; European Civil Society Platform on Lifelong Learning (2018). Pre-Primary Education in Ukraine.
[216] ACAPS (2022). Ukraine: People with Disabilities Thematic Report.
[217] Biriukova, T. et al. (2023). Families Find a Way: Children with Disabilities in War-Torn Ukraine, accessed: 04 April 2024. https://www.driadvocacy.org/sites/default/files/2023-10/Families-Find-a-Way-1.pdf
[218] Ibid.
[219] Ibid.
[220] Lamichhane, K. (2015). Disability, Education and Employment in Developing Countries
[221] Filmer, D. (2008). Disability, Poverty, and Schooling in Developing Countries: Results from 14 Household Surveys.
[222] Mezzanotte, C. (2023). The Social and Economic Rationale of Inclusive Education: An Overview of the Outcomes in Education for Diverse Groups of Students, accessed: 04 April 2024. https://one.oecd.org/document/EDU/WKP(2022)1/en/pdf
[223] Ebersold, S. et al. (2016). Financing of Inclusive Education: Mapping Country Systems for Inclusive Education, accessed: 04 April 2024. https://www.european-agency.org/sites/default/files/financing_of_inclusive_education_mapping_country_systems_for_inclusive_education.pdf
[224] Open Mind School (2022). The Costs of Inclusive and Special Education, accessed: 04 april 2024. https://www.openmindschool.org/post/the-costs-of-inclusive-and-special-education

Effective inclusion goes beyond simply enrolling children with disabilities alongside typically developing peers. At the instructional level, adequate specialist support, modifications, and adaptations are essential to promote participation and learning of all children.[225] Early intervention services, assistive devices and technologies, and accessible facilities and learning materials help create an inclusive environment.[226] Instructional approaches like peer-mediated strategies demonstrate effectiveness for increasing social interactions between children with and without disabilities.[227] Naturalistic instructional approaches, including embedded instruction, successfully address individualised learning goals within classroom routines.[228]

Developing a competent workforce requires substantial professional development to build teacher attitudes, knowledge, and skills for inclusion. This process includes developing appropriate attitudes amongst teachers, since beliefs and perceptions about disability amongst teachers can significantly influence how empathetic and effective they are in addressing the needs of children with disabilities in the classroom.[229] Pre-service and in-service training must provide teachers with practical strategies to support diverse learning needs in inclusive classrooms. Ongoing mentoring and communities of practice sustain positive changes in pedagogy and practice over time.

At the policy level, laws and frameworks need to enshrine rights and prescribe required support for inclusion. To realise the potential requires relying on adequate funding, multi-agency collaboration, and political commitment to enact a progressive universalist approach.[230]

Ireland is renowned for its approach to inclusive education, working hard to incorporate all children into high-quality, inclusive ECEC. The case study below details their policy approach, which could serve as inspiration for changes Ukraine could make to its inclusive education model.

Box 12. Case Study: Inclusive ECEC in Ireland[231]

Ireland has become a global leader in progressive, inclusive ECE. In 2020, its Access and Inclusion Model (AIM) won a global award for innovative policy.

Ireland recently introduced numerous policy and programmatic reforms in its ECEC sector. In the 1990s, Ireland had an ECEC sector dominated by expensive, informal, ad-hoc home care; the sector was largely unsupported or unregulated by the state.[232] In 2018, however, the government introduced Ireland's first national early years strategy, '*First 5: A Whole of Government Strategy for Babies, Young Children, and their Families*'.[233] This strategy was accompanied by a cross-government implementation plan in 2019.[234] The programme was fully funded by the Department of Children, Equality, Disability, Integration and Youth (DCEDIY), and ECEC centres receive funding from the state government.

The Access and Inclusion Model (AIM) is a child-centreed model providing progressive support to children with disabilities or Special Extra Needs (SEN), complementing the government's ECCE Scheme. AIM was introduced in Ireland in 2016. It was designed to support inclusive preschool education and enable children with disabilities or children with SEN to access and fully participate in early learning opportunities.

AIM provides 7 levels of support, moving from support that should be in place for all children (levels 1-3) to targeted support for children with specific needs (levels 4 – 7).

The first three levels provide universal supports to build more inclusive cultures. The policies and strategies set out in these levels should be carried out in all preschool schools, affecting the ECEC environment for all children. Level 1 trains preschool staff as Inclusion Coordinators; Level 2 delivers equality, diversity, and inclusion training; and, Level 3 offers continuous professional development courses in disability and inclusion.

[225] World Health Organization and UNICEF (2012). Early Childhood Development and Disability: A Discussion Paper.
[226] Theirworld (2022). Left Behind from The Start: How governments and Donors Are Failing Children with Disabilities in Their Early Years.
[227] Terpstra, J. and Tamura, R. (2008). Effective Social Interaction Strategies for Inclusive Settings.
[228] Snyder, PA., et al. (2015). Naturalistic Instructional Approaches in Early Learning: A Systematic Review.
[229] Mitchell, L. and Hegde, A. (2007). Beliefs and Practices of In-Service Preschool Teachers in Inclusive Settings: Implications for Personnel Preparation.
[230] Department of Children and Youth Affairs, Government of Ireland (2019). An End of Year One Review of The Access and Inclusion Model (AIM).
[231] This information was adapted from a longer case study produced by Genesis Analytics for UNICEF and the Government of Azerbaijan.
[232] Eurochild and International Step-by-Step Association (2020). Case Study – Ireland, First Years, First Priority. https://www.earlychildhoodireland.ie/wp-content/uploads/2021/11/Case-Study_-Ireland-2020.pdf
[233] Government of Ireland (2018). First 5: A Whole of Government Strategy for Babies, Young Children, and their Families, (Government of Ireland: Dublin, Ireland).
[234] Eurochild and International Step-by-Step Association (2020). Case Study – Ireland, First Years, First Priority. https://www.earlychildhoodireland.ie/wp-content/uploads/2021/11/Case-Study_-Ireland-2020.pdf

The next four levels provide targeted assistance so all children can meaningfully participate in ECCE. This assistance includes expert advice, specialised equipment, therapeutic supports, and additional classroom staffing, as needed. Rather than funding individual supports, AIM invests in increasing the capacity of settings to be more inclusive. To qualify for targeted support, each child is assessed, and support is provided if it is found to be essential to that child's participation in ECEC. Importantly, an official diagnosis is **not** required, ensuring accessibility for all children.

- By 2020, over 12,100 children had directly benefited from AIM, with many more gaining through the universal supports fostering inclusive cultures. AIM has reduced reliance on segregated provision and accepts children regardless of formal diagnosis. Its 2019 evaluation found the following:
  - 76% of services believed AIM had made their culture more inclusive.[235]
  - 78% of parents stated their child had benefited.

The programme's blended approach of coordinated universal and targeted assistance offers a model for other systems striving to make high-quality early education more equitable and accessible.

In 2020, AIM was recognised for its contribution to including children with disabilities, winning a global award for innovative policy at the Zero Project Awards.[236] As of 2020, it was recorded that AIM had assisted over 12,100 children directly and supported many more indirectly through universal support and inclusive culture. In particular, it has led to the reduction of special schools/classrooms for children with disabilities and has removed the need for a formal diagnosis for children to receive support.

3.1.3.5.3 Internally Displaced Children

As of 2024, more than half of the 3.7 million people estimated as internally displaced across Ukraine are children, including 16% who are 5 years old and under.[237] This includes 111,500 people living in collective sites.[238] These populations are concentrated in a small set of areas, with over half of all IDPs living in five oblasts and almost one million living in Dnipropetrovska and Kharkivska Oblasts.[239] Displacement is not a short-term phenomenon. As of February 2024, 70% of displaced families in Ukraine had been so for more than one year.[240] The longevity of displacement increases the likelihood that families will settle in their new locations, potentially putting increased pressure on social services and other resources. 75% of parents who have been internally displaced have reported that, because of the war, their children have symptoms of psychological trauma with impaired memories, shorter attention spans, and decreased ability to learn.[241] Furthermore, places of safety and security for children are limited and often ill-equipped as many of locations lack child-friendly facilities and infrastructure for small children.[242]

Internally displaced children face a plethora of developmental challenges due to the disruption of their daily lives and insufficient provision of educational facilities and services. Some Ukrainian children have been displaced multiple times, causing continued disruption to essential services, such as education and healthcare.[243] In areas where remote learning has become the norm, it can be challenging for families continually on the move to get access to the technology required.[244] For those children who move to areas where ECEC can be accessed, changing environments can still be very disruptive, making it challenging for children to adjust and therefore reap the benefits of high-quality ECEC.[245] The IOM's latest report for Ukraine found that households with children were reporting higher needs than households without; these needs stretched from education to healthcare and nutrition.[246]

[235] Ireland Department of Children and Youth Affairs (2019). An End of Year One Review of the Access and Inclusion Model (AIM).
[236] The Zero Project focuses on the rights of persons with disability globally.
[237] All displacement figures drawn from IOM (2023). Ukraine — Internal Displacement Report — General Population Survey Round 14 (September – October 2023). https://reporting.unhcr.org/operational/situations/ukraine-situation?page=0%2C%2C%2C1
[238] Ibid.
[239] Ibid.
[240] IOM (2024). Ukraine and Neighboring Countries 2022-2024: 2 Years of Response, accessed: 29 April 2024. https://www.iom.int/sites/g/files/tmzbdl486/files/documents/2024-02/iom_ukraine_neighbouring_countries_2022-2024_2_years_of_response.pdf
[241] Euronews (2023). Life on The Margins: The Fate of Internally Displaced Ukrainian Children. https://www.euronews.com/2023/06/07/life-on-the-margins-the-fate-of-internally-displaced-ukrainian-children
[242] Ibid.
[243] Save the Children (2023). A Heavy Toll: The Impact of One Year of War on Children in Ukraine.
[244] Ibid.
[245] Daunt, R. (2023). Life on The Margins: The Fate of Internally Displaced Ukrainian Children, accessed: 04 April 2024. https://www.euronews.com/2023/06/07/life-on-the-margins-the-fate-of-internally-displaced-ukrainian-children
[246] IOM (2023). Ukraine Internal Displacement Report, accessed: 04 April 2024. https://reliefweb.int/report/ukraine/iom-ukraine-internal-displacement-report-general-population-survey-round-15-november-december-2023-enuk

Ukraine has specific legislation addressing the rights and protection of IDPs. The Law of Ukraine on Ensuring the Rights and Freedoms of Internally Displaced Persons (No. 1706-VII) was adopted in 2014 to provide legal protection and assistance to those affected by the war in eastern Ukraine. IDPs have the right to enrol children in preschool (There are, however, administrative requirements to be granted formal IDP status which some households may not meet). Furthermore, in 2017, Ukraine adopted a Strategy of Integration of Internally Displaced Persons and Implementation of Durable Solutions to Internal Displacement until 2020.[247] Various humanitarian aid organizations in Ukraine and the United Nations continue to extend assistance to IDPs in Ukraine. In partnership with the Government of Ukraine, UNHCR has committed in 2024 to provide legal assistance to 207,500 IDPs and returnees to help them obtain civil status and property documentation, while 467,500 individuals will be provided with emergency shelter and sustainable housing support.[248]

The landscape for IDPs makes it accessible for IDP children to enroll in mainstream ECEC facilities. As discussed, Ukraine has a comprehensive ECEC legal and policy landscape that articulates preschool education for all. This enables IDP children to enrol in ECEC centres when they arrive in new locations. It is also possible for IDP children to apply for additional support in ECEC centres. Additional support is also given to IDPs, such as free school meals, educational materials, and access to online versions of textbooks.[249] A kindergarten in Dnipropetrvoska stated that the IDP children in their kindergarten were exempt from paying for school meals, and the children also received additional psychological support to help their transition.[250] Additional initiatives funded by development partners are also supporting IDP children. With help from the EU Delegation to Ukraine, the Inspiration Café was started in Uzhhorod in Western Ukraine to provide IDP children with education, psychological counselling, socialisation, and integration into local communities.[251] The Ministry of Education and Science (MoES), in collaboration with UNICEF, is supporting the '2 by 2' model of education for children who are unable to access ECEC. This model allows children to attend facilitated ECEC activities twice a week for two-hour long sessions, while their parents are given support on how to set up online learning. This support is available for IDP children and local children, although it is particularly beneficial to help internally displaced families settle into new homes.

Box 13: IDP Children in Kindergartens in Ukraine[252]

> There are currently two internally displaced children in the kindergarten. They receive psychological support and are exempt from paying for meals.
>
> *Director, Sonechko Kindergarten*

While Ukraine can provide ECEC to IDP children, challenges remain in ensuring they have access to the specific support needed. While some ECEC centres are providing additional help to IDP children, others are unable to produce that kind of support. Kindergartens in Chernihiv noted that teaching staff have not received additional training on working with IDP children, meaning that they struggle to provide the unique support those children might need.[253] Moreover, the influx of IDPs across the country is putting a strain on resources, including ECEC centres. In regions that host a sizeable number of IDPs, schools have reached their maximum capacity, preventing local children from being enrolled and also putting the quality of education at risk.[254] Ensuring that ECEC centres are suitable for IDP and local children is paramount, otherwise the quality of ECEC services is likely to be strained. In areas where ECEC centres are closed, both IDP and local children suffer from the lack of resources. However, IDP children are more likely to struggle to access online services due to ongoing disruption meaning that they are less likely to have technological devices and might struggle to access the internet when first arriving in a new region.[255] Reports also suggest that caregivers are reluctant to put their children into ECEC services as they hope they will soon be able to return home.[256]

[247] Norwegian Refugee Council (2019). Durable Solutions for Internally Displaced People: In a Nutshell.
[248] UNHCR (2024). Ukraine Situation, accessed: 28 April 2024. https://reporting.unhcr.org/operational/situations/ukraine-situation#:~:text=UNHCR%20will%20provide%20legal%20assistance,shelter%20and%20sustainable%20housing%20support
[249] Save the Children (2021). Action Towards Increased Quality Education for Internally Displaced Children, accessed: 04 April 2024. https://resourcecentre.savethechildren.net/pdf/action_towards_education_id_children_sg.pdf/
[250] Interviews in Dnipropetrovsk Oblast Kindergarten. Conducted by Partnership for Every Child, December 2023.
[251] EU NeighboursEast (2022). EU Helps Bring 500 Ukrainian IDP Children to School, accessed: 04 April 2024. https://euneighbourseast.eu/news/latest-news/eu-helps-bring-500-ukrainian-idp-children-to-school/
[252] Interviews in Dnipropetrovsk Oblast Kindergarten. Conducted by Partnership for Every Child, December 2023.
[253] Interviews in Chernihiv Oblast Kindergarten. Conducted by Partnership for Every Child, December 2023.
[254] ACAPs (2022). Ukraine: Impact of the Conflict on Education, accessed: 04 April 2024. https://www.acaps.org/fileadmin/Data_Product/Main_media/20220817_acaps_thematic_report_ukraine_analysis_hub_impact_of_conflict_on_education_0.pdf
[255] Save the Children (2023). A Heavy Toll: The Impact of One Year of War on Children in Ukraine.
[256] Save the Children (2021). Action Towards Increased Quality Education for Internally Displaced Children, accessed: 04 April 2024. https://resourcecentre.savethechildren.net/pdf/action_towards_education_id_children_sg.pdf/

Box 15: Learning Circles in Columbia[263]

Learning circles provide basic education to IDPs. They have flexible curriculums and timeframes, meaning students can enter at any time. These learning circles support students if they need to catch up, and completion guarantees the child a place in formal education.

A community component plays a fundamental role in integration. Evidence suggests this additional support helps IDPs and local children integrate much more successfully.

Providing IDPs with access to ECEC is only one part of a complex process. The quality of ECEC depends on the right services and resources being in place for both IDP and local children. There is scope for Ukraine to improve the transition of internally displaced children into the formal education sector, and to ensure a smooth transition. This is likely to improve the quality of all ECEC and for all children.

3.1.3.6 Findings: Total Monetary Benefits

Table 13 reports the total economic value of all the monetizable benefits associated with scaling up ECEC. All benefits have been discounted to account for the differential time frames of their realisation. It is important to reiterate that it is not possible to monetise all impacts related to ECEC, meaning that some benefits are not captured in these economic figures (although will be discussed in the following sections). Further, some of these benefits will be felt immediately or very soon after the intervention is implemented; however, others will impact a child's outcomes over the course of life and could continue to be felt fifty years after implementation.

Table 13. Monetised Additional Benefits under Fast, Medium, and Slow Scenarios, in UAH Billions, Discounted at 5%

	Fast	Medium	Slow
Better Education Outcomes	296	212	128
Reduced Unpaid Care Work and Female Economic Empowerment	171	137	101
Meaningful Employment Opportunities	55	44	32
TOTAL	**522**	**393**	**261**

When taken together, these findings demonstrate the impressive returns that ECEC can bring to Ukraine if quality services are further scaled up. These estimates have limitations and have been based on a series of assumptions, yet they provide robust evidence of the value of ECEC services. It is estimated that, when accounting for all three monetisable impact pathways, ECEC could lead to monetary gains of up to UAH 522 billion in the fast scenario. This figure would be lower, but still vast, under the medium and slow scenarios – at UAH 393 billion and UAH 261 billion, respectively. To contextualise these figures, the IMF estimates that the gross domestic product (GDP) of Ukraine is UAH 7.6 trillion.[264] While the benefits from scaling up ECEC will be felt across many years, the total estimated benefits of these interventions would equate, depending on the scenario, to 4-9% the output of the entire Ukrainian economy in 2024.

These findings also show that the most significant economic impact will come from improving educational outcomes among children. By supporting holistic child development in the early years, children are expected to thrive in later life: attaining more and a better quality of education and, therefore, going on to have a higher lifetime earning potential. In discounted terms, these impacts have been projected to amount to between UAH 128 – 296 billion, depending on the scale-up scenario. By supporting young children in their early learning, Ukraine will be fostering a strong human capital base for its economy. This will give tomorrow's workforce the skills to compete in increasingly competitive global markets and to support rebuilding after the war.

Finally, evidence also shows that there will be immediate economic benefits from ECEC interventions. The impact pathways affecting parents/caregivers and staff have the potential to generate near-future benefits on Ukraine's economy and society. By scaling up access to services, parents/caregivers will have opportunities to pursue income-generating activities, and new opportunities for meaningful work within the care and early years sector will come available. The size of these benefits is expected to be high. On average, across the 26 years of scale up, it is projected that these impact

[264] International Monetary Fund (2024). 'Ukraine', IMF Data Mapper. Published online, available at https://www.imf.org/external/datamapper/profile/UKR.

pathways will be valued at UAH 9 billion in the fast scenario, UAH 7 billion in the medium scenario, and UAH 5 billion in the slow scenario. These are important pathways to emphasise, as these benefits can quickly improve wealth and well-being across Ukraine, will likely be politically popular, and should support government fiscal space (largely through tax revenues).

3.1.4 Economic Evaluation

Scaling up ECEC services is expected to be a sound social and economic policy choice for Ukraine. Results of this modelling demonstrate that, should Ukraine fail to increase access to quality services, there will be a substantial opportunity cost (Table 14). The monetizable benefits so greatly outweigh the costs of scaling up service delivery that these projections suggest there could be a cost of inaction totalling over UAH 419 billion in the fast scenario. Under the medium and slow scenario, this cost remains high, with an opportunity cost of UAH 311 billion and UAH 200 billion, respectively. These findings constitute strong empirical evidence of the need for increased funding for ECEC services.

Evidence produced in this economic evaluation also demonstrates the urgency for investment. The faster Ukraine can scale up access to quality ECEC, the greater the economic returns will be (Table 14, Figure 19). For every UAH 1 invested in a scale-up of ECEC services, it is estimated that UAH 4.3 would be returned in socio-economic benefits under the slow scenario. This return rises to 4.8 in the medium scenario, and 5.1 in the fast scenario. The benefit-cost ratio, therefore, would be almost 20% higher if the scale-up is executed quickly. With a population facing significant out-migration and ageing demographic trends, investments in ECEC cannot wait. The strong returns offered by this human capital intervention make it a sound investment, and one which would underpin a social contract based on prosperity, equity, and peace.

Table 14. Economic Benefits, Costs, and Cost of Inaction for the Fast, Medium, and Slow Scale-up Scenarios, in UAH billions, Discounted at 5%[265]

	Fast	Medium	Slow
Total Costs	103	82	61
Total Benefits	522	393	261
Cost of Inaction	**419**	**311**	**200**

Figure 19. The Expected Rate of Return on Every UAH Invested for the Fast, Medium, and Slow Scale-up Scenarios, UAH.

The monetary and non-monetary benefits associated with investments in ECEC are significant. The time for Ukraine to make these investments is now.

Box 16: The Importance of Investments into ECEC

With a population facing significant out-migration and ageing demographic trends, investments in ECEC cannot wait. Not only will investment in high-quality, inclusive ECEC lead to significant economic returns, but it will also generate non-economic returns in years of schooling, female labour-force participation, and new employment opportunities. A Ukrainian society will be created that people want to return to in the short-term, and which keeps growing and developing in the long-term. The strong returns offered by this human capital intervention make it a sound investment, one which would underpin a social contract based on prosperity, equity, and peace.

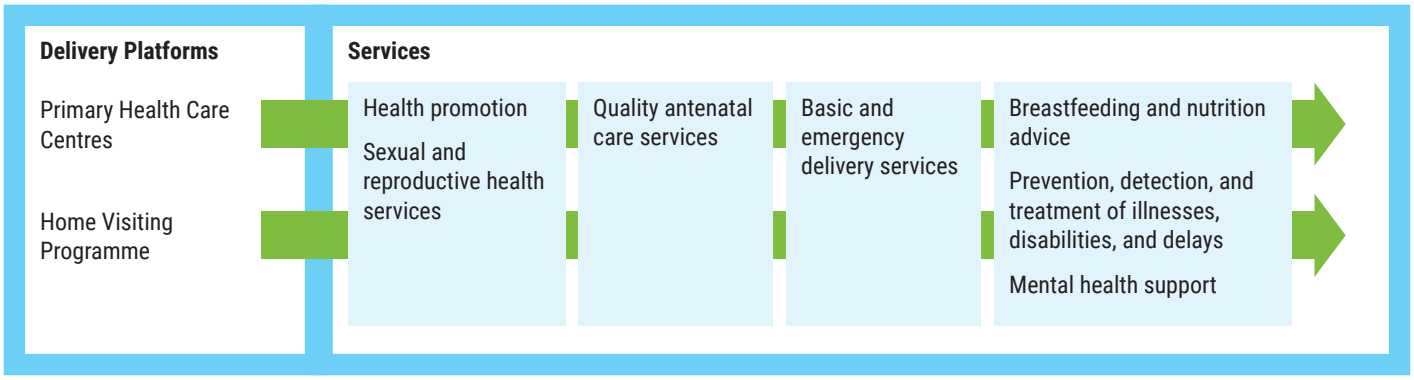
[265] Findings from inclusive education are not included in these calculations.

3.2 Health and Development

3.2.1 Overview

For children to survive and thrive, they need access to services which promote good health and adequate nutrition. These services can be wide ranging and can include interventions which target women of reproductive age, pregnant women, and young children themselves. Drawing on the Nurturing Care Framework, key health and development interventions have been selected to form an ambitious, but relevant, package for Ukraine. The health and development services which provide these interventions, and the platforms used to deliver them, are outlined in Figure 20. A full list of the interventions is included in the Annex.

Figure 20. Health and Development Services for Early Childhood Development



This section of the report establishes clear benefits from investing in health and development interventions. A summary of the key findings can be found below and will be explained in more detail throughout this section.

Box 17. Key Findings from the Health and Development Section

- The benefits of investing in health and development interventions far outweigh the costs. Up to **163 billion UAH** could be generated between 2024 and 2050 following investments into these interventions. The cost of inaction could be as high as **128 UAH billion** in the fast scale-up scenario.
- Scaling up health and development interventions also has considerable **non-economic benefits** through **child deaths and stunting cases averted.**
- Investments in some interventions, such as exclusive breastfeeding and childhood vaccinations, have particularly high benefits.
- In Ukraine, the home visiting programme is an important service to **deliver these interventions,** particularly in the context of the war when travel is sometimes restricted and the benefits of longer appointments are significant.
- Expanding the home visiting programme **could ensure that more families across Ukraine have easy access to healthcare interventions** and a **support network** to call if needed.

3.2.2 Cost Estimates

3.2.2.1 Methodology

Costing was conducted predominantly using the OneHealth Tool (OHT), which is housed on Spectrum software.[266] OHT was developed by Avenir Health and overseen by the United Nations Inter-Agency Working Group on Costing. As such, it is widely used by researchers, policy- and decision-makers, and development organizations. The tool allows for modelling and estimation of the costs of different critical health and development interventions under different coverage scenarios. It is highly dynamic, allowing users to input coverage rates which vary over different time horizons, and decision-makers

[266] OneHealth Tool https://www.avenirhealth.org/software-onehealth.php and Spectrum https://www.avenirhealth.org/software-spectrum.php

to see how costs will change in coming years and under different scenarios. Further, the model accounts for interactions between the scale up of different interventions concurrently, thus accounting for issues related to under- or over-counting costs. The modules and tools in Spectrum draw from up-to-date, contextualised, and robust evidence on the costs associated with the delivery of different health interventions and reflects both the costs of the individual intervention, as well as the wider system costs required for the delivery. The modules and tools in Spectrum have default data (by country) which feeds into cost estimation, including salary data (for different cadres of healthcare workers), time spent by type of healthcare worker per intervention, drugs and supply prices, and costs related to outpatient and inpatient visits.

Projections were set up for each of the scenarios modelled in this study (baseline, fast, medium, and slow). For each projection, coverage data for each relevant intervention, by year, were entered into the model, and any updates to costing input data were made. The tool was then run to produce estimates on the costs – both by intervention and for the entire system – by year, for each of the scenario projections. These costs were set to account for inflation over time. The costs were extracted and entered into Microsoft Excel, where costs between scenarios were compared. Costs were calculated in total terms and in additional terms (the costs of that scale-up scenario minus the baseline costs). These costs were then discounted at a rate of 3% to reflect their net present value.

The cost estimates produced by OHT reflect the scale up in coverage of interventions, rather than the increase in reach of service delivery platforms. OHT has default settings (which can be changed) on which platforms will be used to deliver different interventions. The platforms in OHT include community programmes, outreach programmes, clinics, and hospitals. The assumed delivery platform differs by the intervention (for example, it is assumed that 100% of caesarean deliveries will take place in a hospital, whereas the promotion of breastfeeding is expected to take place 40% through community programmes, 10% through outreach programmes, and 50% in clinics). The costs associated with scaling up the specific home visiting programme conducted in Ukraine, therefore, have not been modelled. However, many of the costs associated with scaling up a home visiting programme could be covered by this costing exercise (as it would provide the interventions costed in this study). The home visiting programme will be a critical delivery channel for the services in the health and development package.

Notably, three of the interventions in the health and development package are not available in OHT. These interventions are as follows:

- **Salt iodisation:** A demographic costing model was developed in Excel drawing on data on the unit cost (cost per person, per year) of salt iodisation.[267] This unit cost (adjusted for inflation) was then applied to the population covered by iodised salt each year, under each scenario, to give an estimate of the total costs. Total costs for each scale-up scenario were compared to the baseline scenario to generate additional cost estimates.
- **Screening, early detection, and treatment of developmental delays and disabilities:** It was not possible to cost screening, early detection, or treatment of developmental delays and disabilities. This was due to a lack of reliable data on current coverage and costing input data in Ukraine. Some of the costs associated with providing these services will be covered by the scale-up of other interventions, as these interventions are often complementary to other early years' services. However, it is strongly recommended that additional research into the costs associated with scaling these vital services in Ukraine is undertaken to support planning and financing.
- **Mental health services for young children:** It was not possible to assess the costs of running mental health programmes for young children in Ukraine due to a lack of data on current prevalence, treatment coverage, and cost input data for effective detection and treatment services. As such, the only costs which have been calculated are those associated with the detection and treatment of perinatal depression. Given the context of the war, it will be especially important to undertake a deep dive costing exercise for mental health services for young children.

3.2.2.2 Findings

The additional costs (the costs of the scale-up scenario minus the costs in the baseline scenario) for the entire period (2023-2050) are presented in Table 15. Over the entire time horizon of the study, Ukraine would be expected to spend an additional UAH 15.9 billion to deliver health and development interventions under the fast scenario. The amount would be expected to be lower in the medium and slow scenarios, at UAH 11.8 billion and UAH 8.6 billion, respectively. The fast scenario is, intuitively, the most expensive; the interventions cover more people, therefore, incurring a higher cost. At the population level, these additional costs are very low. For the fast scenario, the additional per capita costs amount to just UAH 17, annually. This is even lower under the medium and slow scenarios, at just UAH 13 or UAH 9, respectively.

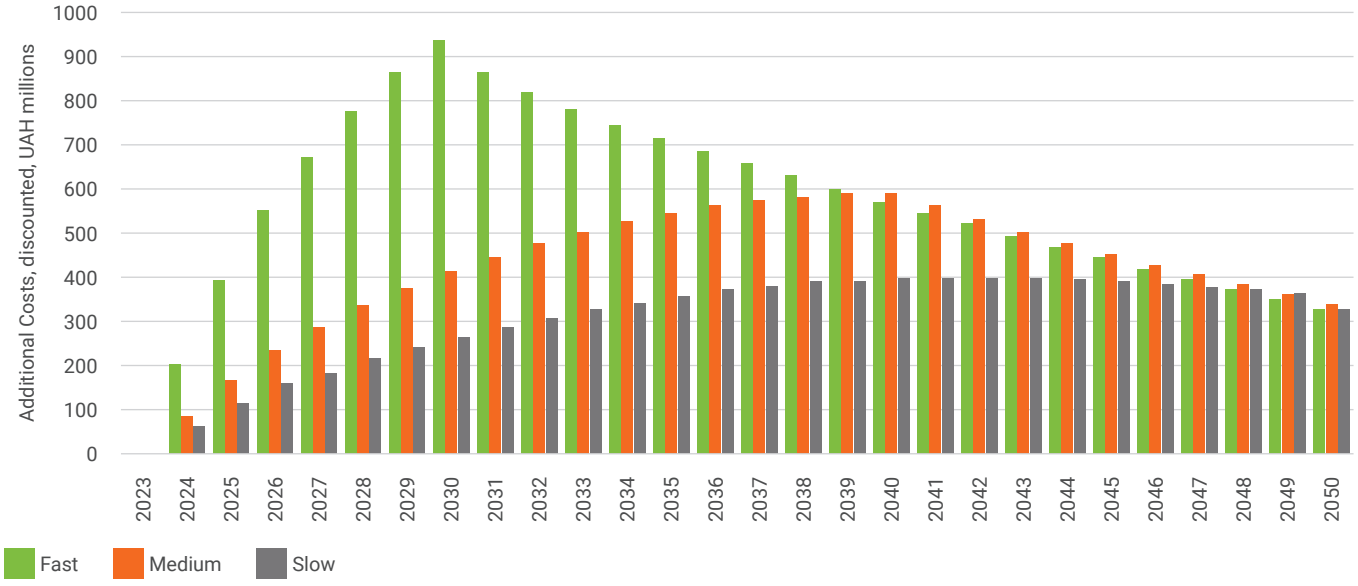
[267] GiveWell (2021). Salt Iodization. https://www.givewell.org/international/technical/programs/salt-iodization#Cost-effectiveness

Table 15. Additional Costs for the Health and Development Package under Fast, Medium, and Slow Scale-Up Scenarios, for the Entire Period and on Average, 2023-2050, in UAH Billions, Discounted at 5%

	Fast	Medium	Slow
Entire Period	15.9	11.8	8.6
Annual Average	0.6	0.5	0.3

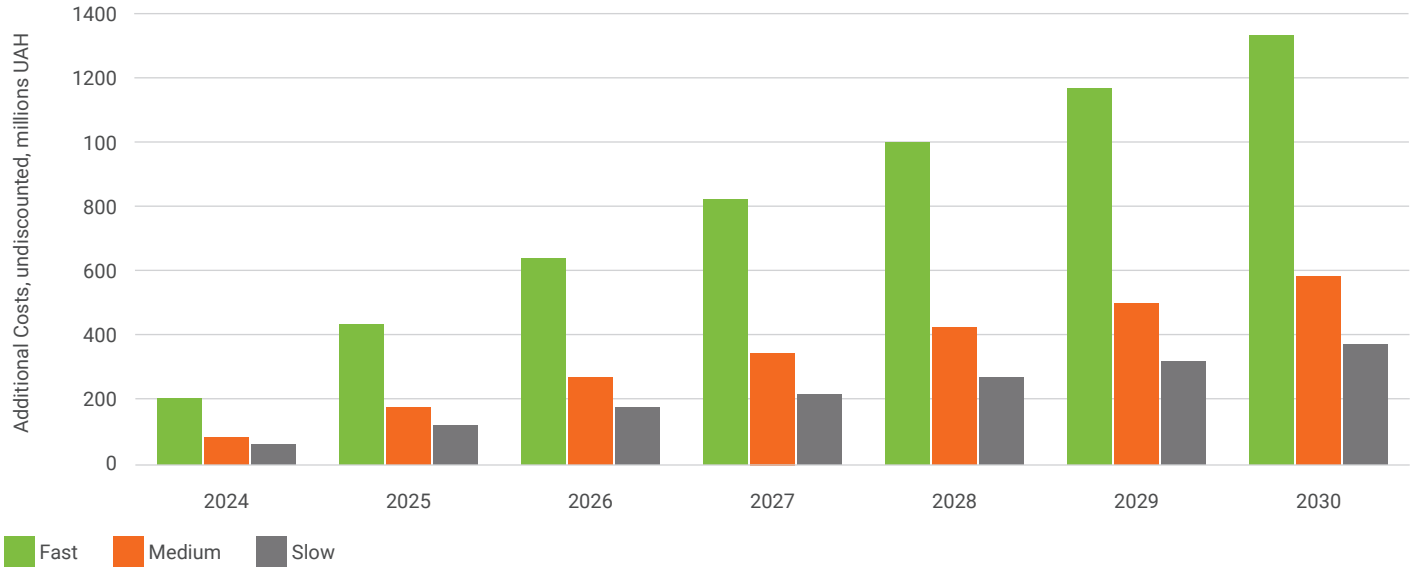
These costs are also presented as annual averages for each scenario. On average, across the 26-year scale-up period, the additional costs incurred would be between UAH 333 million and UAH 611 million, depending on the scale-up scenario. These figures are just averages and would be expected to fall differentially across the years. A projection of the actual additional annual cost estimates for each scenario is presented in Figure 21. While annual additional costs are expected to rise under all three scenarios, costs are expected to stabilise (particularly in the case of the fast scenario) would come down. The declining annual costs depicted in Figure 21 are a result of demographic changes in Ukraine (falling child populations) and the discounting rate (which makes costs incurred later appear less expensive).

Figure 21. Additional Annual Costs to Scale-Up Health and Development Interventions under Fast, Medium, and Slow Scale-Up Scenarios, 2023-2050, in UAH Millions, Discounted at 5%



These costs were also calculated in undiscounted terms, which can be useful to decision-makers for planning and budgeting purposes. The undiscounted additional costs of the three scenarios are presented in Figure 22 for the period 2024-2030. When undiscounted, these additional cost estimates are higher. The costs of providing these services are expected to increase; as coverage of services increases, so does the cost of delivering the service (because of inflation). These additional costs are expected to increase from around UAH 66 million in 2024 to UAH 376 million in 2030 under the slow scenario; however, this increase is higher under the fast and medium scale-up scenarios, as there are more people being covered by these services.

Figure 22. Undiscounted Annual Additional Costs for Health and Development Package under Fast, Medium, and Slow Scale-Up scenarios, 2024-2030, in UAH Millions



3.2.3 Benefits

3.2.3.1 Methodology

Analysis of the direct health outcomes attributed to the scale-up of these interventions was also modelled in the Lives Saved Tool (LiST), which is a module on Spectrum.[268] LiST is a mathematical modelling tool which allows users to estimate the impact of coverage change of the interventions on mortality (as well as several other health outcomes) in low- and middle-income countries. It was developed by the Institute for International Programmes at John Hopkins Bloomberg School of Public Health and is maintained by Avenir Health. The tool works to calculate changes in cause-specific mortality based on intervention coverage change, intervention effectiveness for that cause, and the percentage of cause-specific mortality sensitive to that intervention. The values used for default effectiveness come from systematic reviews, meta-analyses, Delphi estimations, and randomised control trials based upon the Child Health Epidemiology Reference Group guidelines.

The projections in Spectrum used to determine the costs for each scenario were, therefore, also run to calculate the health benefits of these interventions. In LiST, health outcomes included child deaths (by cause), maternal deaths (by cause), stunting cases, anaemia cases, and disease-specific incidence (diarrhoea, pneumonia); and were extracted into Excel for each scenario (baseline, fast, medium, and slow). Deaths (child and maternal) for each scenario (by year) were then converted into disability-adjusted life years (DALY) lost, which is a metric that accounts for both mortality and morbidity. This calculation involved first transforming deaths into years of life lost (YLL) figures by estimating the number of years a person could have expected to have lived if they had not died.[269] Years of life lived with disability (YLD) were then estimated from these YLL figures for each disease-burden area. To estimate this, a ratio between YLL and YLDs was used, which was calculated with historic data from the Global Burden of Disease database on YLLs and YLDs, by age group and disease-burden type, in Ukraine. YLLs and YLDs were added to create DALY figures, per year, for each scenario.[270] In the non-communicable diseases module on Spectrum (which covers mental health, substance abuse, and

[268] Lives Saved Tool https://www.livessavedtool.org/

[269] For neonatal deaths, it was assumed that the age of death was 0 and that life expectancy would otherwise have been 71 (in line with World Bank estimates on the life expectancy in Ukraine for the latest year available). For each neonatal death, therefore, the years of life lost would equal 71. For child deaths (1-59 months) the age of death was assumed to be 2.5 years, on average, and the life expectancy was also held at 71. This means for each child death; the YLL was assumed to be 68.5. Finally, for maternal deaths, the expected life expectancy at death (for women who died in childbirth) was estimated at 36. This was based on Ukraine-specific data from: Institute of Health Metrics and Evaluation (2024). Global Burden of Disease (GBD) database. https://shorturl.at/oDHRW

[270] Global Burden of Disease database https://www.healthdata.org/research-analysis/gbd#:~:text=The%20GBD%20study%20is%20the,outcome%20and%20health%20system%20measures

neurological disorders), YLLs and YLDs due to perinatal depression were also extracted and added to make DALYs for each scenario.[271] These DALY figures were added to those from LiST. The three scale-up scenarios were then compared to the baseline scenario to calculate the deaths, stunting cases, DALYs, etc., averted each year.

The only intervention which was modelled outside of modules on Spectrum was salt iodisation. This intervention is not included in any module on Spectrum and, thus, a model was designed in Excel which drew from global literature on the efficacy of salt iodization in improving health outcomes.[272] Evidence indicates that salt iodisation can reduce the rate of iodine deficiency (as well as other issues, such as goitre and hypothyroidism), which is associated with developmental delays in children.[273] As such, iodine deficiency is linked to reduced cognitive functioning and lower IQ.[274] For each scenario, evidence was used to calculate how many cases of iodine deficiency could be averted in Ukraine each year as a result of a scaleup in salt iodisation.

These health benefits could then be monetised following standard practices in the literature. The following health benefits were monetised:

- **DALYs averted:** Each DALY was assumed to have a monetary value of 1.5 times the GDP per capita (which was assumed to be UAH 168,815).[275] This valuation of DALYs is in line with methodology in global literature and recognises the socio-economic cost of health burdens.[276] These DALYs account for both the mortality and morbidity averted in children and mothers.
- **Iodine deficiency cases averted:** For each case of iodine deficiency averted, an estimate of the impact on lifetime earnings for the individual was calculated. This calculation was generated based on evidence from literature on the impact of iodine deficiency on IQ in children.[277] This was then transformed into a productivity loss based on evidence on the relationship between IQ and productivity.[278] This productivity loss was then applied to a child's expected lifetime earnings to monetise this impact.

These monetised benefits were then added together and discounted at a rate of 5% for each scenario.

It is impossible for any economic evaluation to fully capture the benefits of good health, development, and wellbeing. The benefits of good health for an individual can be difficult to quantify, but may include improved energy, confidence, or happiness. Putting an economic value on health is, therefore, challenging; only interventions that have clear evidence of efficacy (across contexts) and quantifiable, monetisable impacts can be captured. Further, the process of monetising this value also rests on assumptions about the value of life and health. However, this activity is intended to provide an indication of the types of benefits (social and monetary) that might arise if these key interventions are scaled up. These results are presented below, alongside a discussion of the wider benefits (which could not be quantified or monetised) from scaling up this health and development package.

3.2.3.2 Findings: Preventable Mortality and Morbidity

Scaling up the reach of crucial maternal and child interventions has been shown to yield impressive benefits. By 2050, it is estimated that just under 18,000 deaths could be averted in the fast scenario – 17,100 children and around 700 mothers. In the medium and slow scenarios, this would be lower, at over 14,000 and 11,000 deaths averted in total, respectively. Figure 23 shows these averted deaths over time; by 2030, almost 3,000 deaths could be averted (fast scenario) – equivalent to 487 deaths a year. The health benefits in the slower scale-ups are understandably lower than those in the fast scenario. This is a result of the slower scale up in coverage (as targets are set later), meaning that a larger proportion of children will not be covered by essential health and development interventions.

[271] Non-communicable diseases module https://avenirhealth.org/Download/Spectrum/Manuals/NCD%20user%20guide%20for%20the%20OneHealth%20Tool.pdf
[272] Aburto, N., Abudou, M., Candeias, V., and Wu, T. (2014). The Effect and Safety of Salt Iodization to Prevent Iodine Deficiency Disorders: A Systematic Review with Meta-Analysis, (World Health Organization: Geneva, Switzerland).
[273] Kapil, U. (2007). Health Consequences of Iodine Deficiency, Sultan Qaboos University Medical Journal, 7(3), 267-272.
[274] Santiago-Fernandez, P., Torres-Barahona, R., Antonio Muela-Martinez, J. et al. (2004). Intelligence Quotient and Iodine Intake: A Cross-Sectional Study in Children, J Clin Endocrinol Metab, 89(8), 3851-7.
[275] IMF (2024). Ukraine. https://www.imf.org/en/Countries/UKR
[276] Stenberg, K., Axelson, H., Sheehan, P. et al. (2014). Advancing Social and Economic Development by Investing in Women's and Children's Health: A New Global Investment Framework, The Lancet, 383(9925), 1333-1354.
[277] Santiago-Fernandez, P., Torres-Barahona, R., Muela-Martinez, J. et al. (2004). Intelligence Quotient and Iodine Intake: A Cross-Sectional Study in Children, J Clin Endocrinol Metab, 89(8), 3851-7.
[278] Food Standards Australia and New Zealand (2006). Consideration of Mandatory Fortification with Iodine: A Short Guide to the Development of a Food Standard for Australia and New Zealand, (Canberra: Australia).

The scale-up of these interventions would tackle the areas of disease burden that are driving preventable mortality amongst young children and their mothers in Ukraine. For young children, most of these averted deaths would otherwise have been caused by the insufficient treatment of neonatal conditions (e.g., prematurity, asphyxia, sepsis), neonatal congenital anomalies, pneumonia, and diarrhoea. These disease burden areas have historically been the most significant contributors to child deaths in Ukraine. Analysis of different disease burdens reveals that deaths among under-fives in Ukraine were most often caused by neonatal disorders. This includes mortality related to preterm birth, sepsis, and encephalopathy due to birth asphyxia. The second most significant contributor is 'other non-communicable diseases,' which is driven by high number of deaths attributed to congenital birth defects (including common disorders, such as heart defects, neural tube defects, and Down syndrome).

Figure 23: Deaths (Child and Maternal) Averted under Fast, Medium, and Slow Scale-up Scenarios, over Different Time Horizons

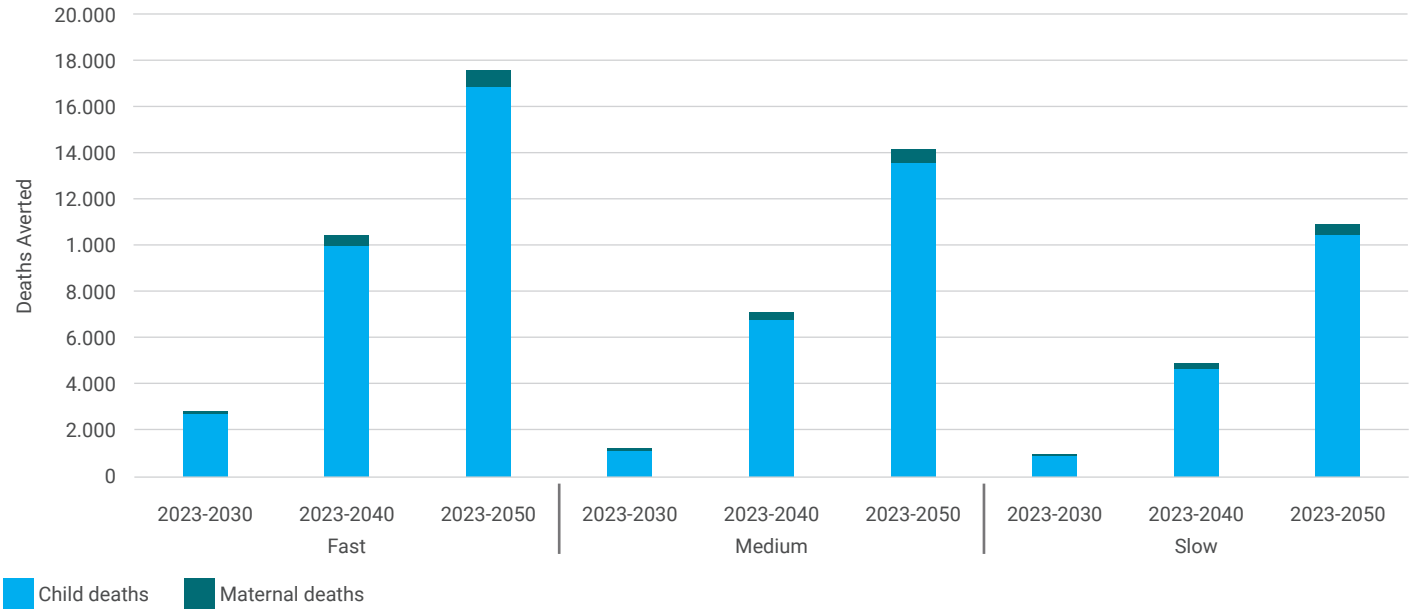
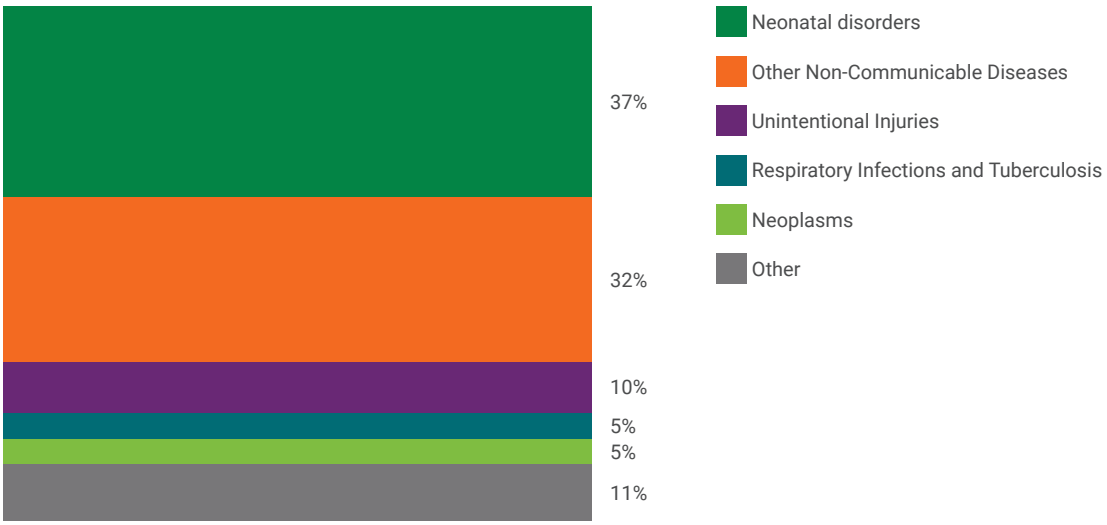


Figure 24: Contribution of Different Disease Burden Areas to Total Deaths in Ukraine for Children under the Age of Five, 2019.[279]



[279] Authors. Data from IHME (2024). GBD Database 2019. NB: Only disease burden areas that contribute over 5% to total child deaths were included as independent bars. Any disease burden area contributing under 5% was compiled to create the Other category.

Significantly, maternal mortality would be most affected by interventions to support women experiencing perinatal depression. Of all maternal deaths averted in Ukraine under the scale-up scenarios, around 50% would otherwise have been the result of perinatal depression (Figure 25).

A scale-up would also have a significant impact on morbidity. More children and mothers would be expected to experience good health, because of receiving these interventions. This means that they not only survive but thrive and reach their full potential. Table 16 shows the deaths and DALYs averted in each scenario over different time horizons.

Figure 25. Proportion of Maternal Deaths Averted by Cause, Fast Scenario, 2023-2050

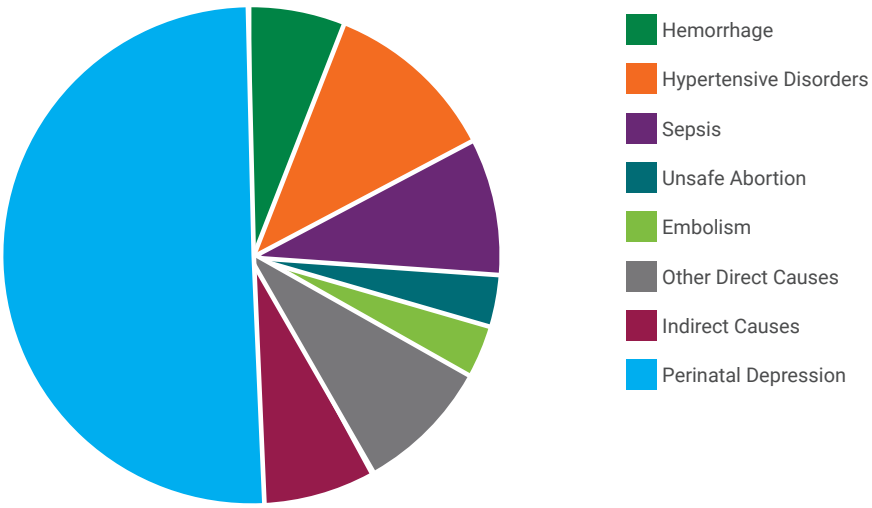


Table 16. Deaths and DALYs Averted for Fast, Medium, and Slow Scale-Up Scenarios, over Different Time Horizons

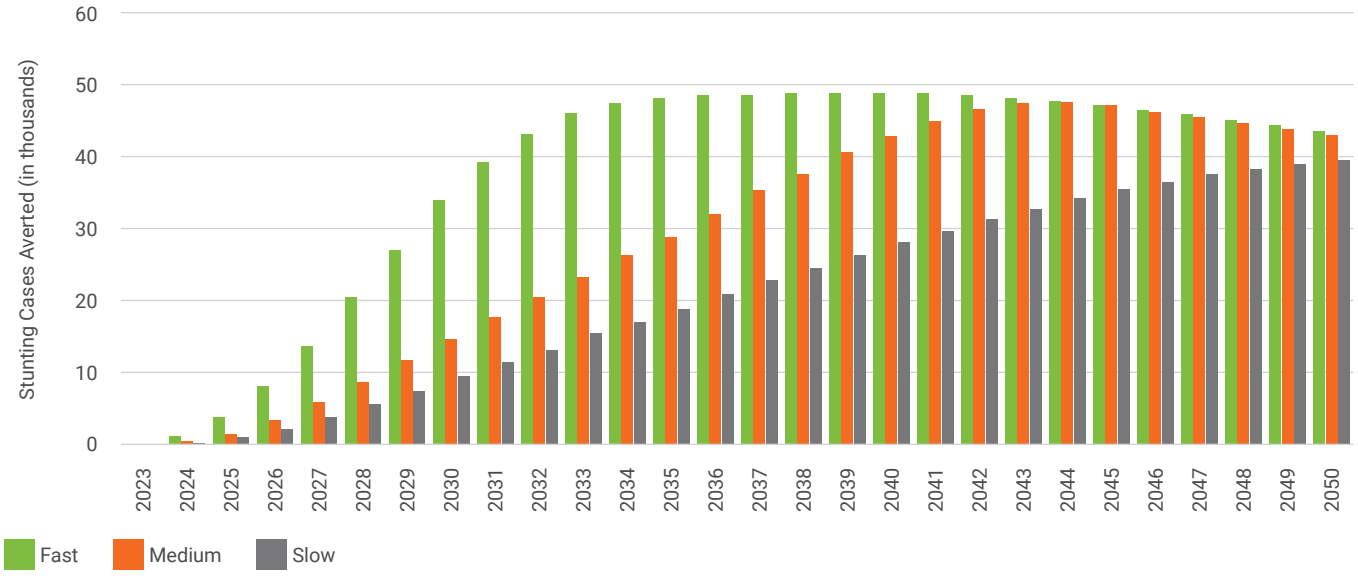
	Deaths Averted			DALYs Averted		
	2023-2030	2023-2040	2023-2050	2023-2030	2023-2040	2023-2050
Fast Scenario	2,921	10,603	17,855	185,677	656,703	1,098,718
Medium Scenario	1,375	7,202	14,365	90,034	459,947	910,196
Slow Scenario	950	4,995	11,089	61,675	315,689	691,195

3.2.3.3 Findings: Better Nutrition

The services provided under the health and development package were also found to have a significant impact on nutritional outcomes. These interventions include micronutrient supplementation during pregnancy, iron fortification, breastfeeding promotion and support, and complementary feeding education; and can all contribute to the prevention of undernutrition. Scaling up these interventions would mean that fewer expectant mothers would suffer from anaemia, the number of low-birth weight babies would reduce, and stunting cases would fall.

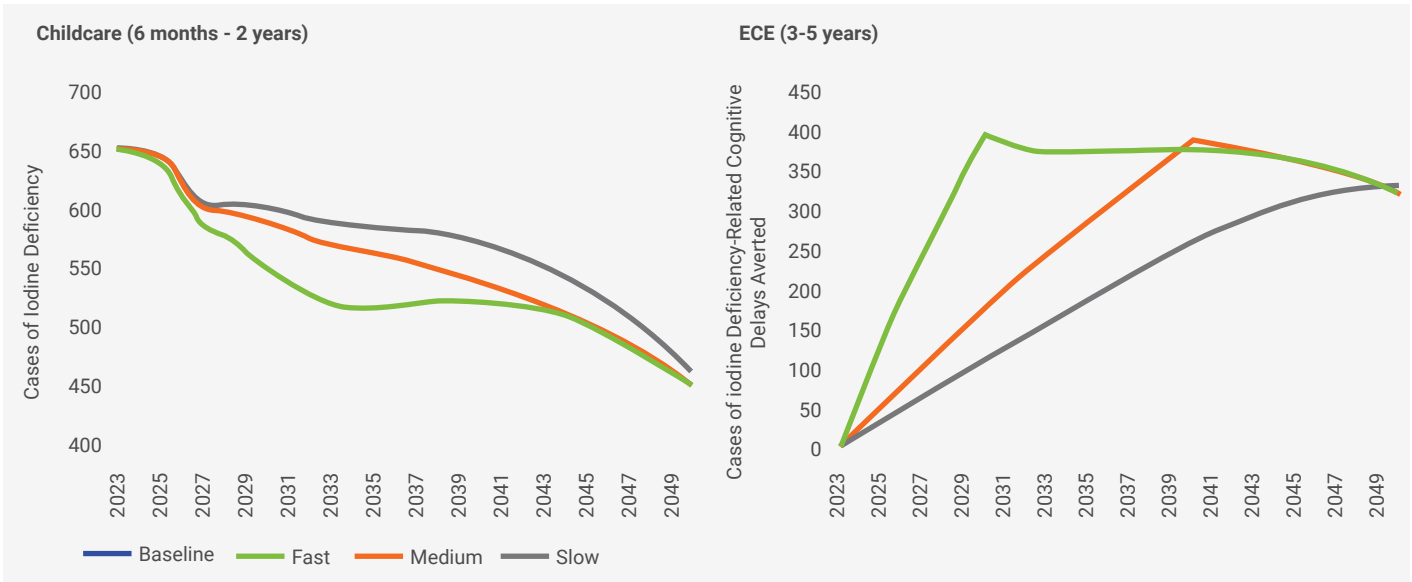
Modelling suggests that thousands of stunting cases would be averted each year under a scale-up of this package. Figure 26 shows the projections for the numbers of stunting cases that would be averted annually under each scale-up scenario. It is estimated that, on average, 21,000 stunting cases could be prevented each year under the slow scale-up scenario (average between 2023 and 2050). This reduction would be even higher under the fast and medium scale-ups, at 37,000 and 29,000, respectively. A whooping 1.03 million cases of stunting could be averted by 2050 under the fast scale up (800,000 under the medium, 580,000 under the slow).

Figure 26. Annual Stunting Cases Averted underFast, Medium, and Slow Scale-Up Scenarios, 2023-2050, in Thousands



Similarly, the number of cases of iodine deficiency would also be expected to fall, leading to a commensurate decline in the population of children suffering from cognitive delays as a result. Under all three scale-up scenarios, the cases of iodine deficiency would be expected to fall. This decline would be more rapid under the fast scenario. In turn, the number of new annual cases of children suffering cognitive impairment because of iodine deficiency would fall by between 197 (in the slow scenario) to 322 (in the fast scenario).

Figure 27. Cases of Iodine Deficiency (Left) and Cases of Iodine Deficiency-Related Cognitive Delay Prevented (Right), under Fast, Medium, and Slow Scale-Up Scenarios, 2023-2050



3.2.3.4 Findings: The Benefits of Mental Health Support

Mental health support for children and caregivers is essential given the current full-scale war. The impacts of poor mental health in early childhood are likely to have impacts across a child's lifetime. There are significant benefits to investing in and scaling up mental health support, and the CBR is likely to be significant. Unfortunately, it was not possible to model the monetary benefits that could be gained from scaling up mental health support due to limited evidence on the long-term impacts of investment. A comprehensive literature review is detailed below on the importance of mental health support for children under six. However, please note that the benefits of mental health support are not included in the economic evaluation at the end of this section. It is also important to iterate that mental health provision is cross-sectoral. It is imperative that all the social sectors, including education, child protection, and social protection, work closely together to provide mental health services for young children.

3.2.3.4.1 The Importance of Child Mental Health and the Challenges Facing Children in Ukraine

On a global scale, an estimated 250 million children and adolescents suffer from at least one mental health condition, which may not be diagnosed but cause unwanted disruptions to daily life.[280] Mental health challenges, such as post-traumatic stress disorder, depression, and anxiety, can develop during a child's formative years; and by the age of 14 these become difficult to reverse.[281] Adequate mental health support can help ensure children grow up able to contribute fully to society. It is essential that the mental health of children is protected in early childhood as the consequences of not doing so can be lifelong. Moreover, it is a crucial opportunity to help children develop healthy habits to ensure good mental health.

Figure 28. Mental Health Effects of War on Children[282]

ILLNESS
Children in conflict-stricken environments are prone to increased levels of illness

DEPRESSION
Prolonged exposure to conflict increases feelings of depression

DIFFICULTY CONCENTRATING
Energy expended on survival makes it difficult to focus on academic tasks

DIFFICULTY SLEEPING
The sounds of missiles or the destruction of buildings can often make it difficult for children to sleep

PTSD
The post-war period may reveal PTSD symptoms in survivors

ANGER
Children in conflict-stricken environments often exhibit aggressive behaviour

SOCIAL WITHDRAWAL
Due to instability and mistrust of adults, children can begin to withdraw

FEAR AND WORRY
Stress induced by being in prolonged danger can cause anxiety and extreme fear

[280] Stelmach R., Kocher E., Kataria I. et al. (2022). The Global Return on Investment from Preventing and Treating Adolescent Mental Disorders and Suicide: A Modelling Study, BMJ Glob Health, 7(6):e007759. doi:10.1136/bmjgh-2021-007759

[281] Kessler R., Berglund P., Demler O. et al. (2005). Lifetime Prevalence and Age-of-Onset Distributions of DSM-IV Disorders in the National Comorbidity Survey Replication, Arch Gen Psychiatry, 62(6):593-602. doi:10.1001/archpsyc.62.6.593

[282] Protecting children's mental health in emergency settings. UNICEF. Access here: https://www.unicef.org/eca/stories/protecting-childrens-mental-health-emergency-settings

Living through war, coupled with forced displacement, increases the mental and physical burdens carried by children.[283] Prolonged exposure to life-threatening events, such as domestic violence, community violence, gender-based violence (GBV), and war, poses significant risks for mental health in children.[284] More than 20% of children and adolescents affected by emergencies are likely to experience a mental health condition in adulthood.[285] While children may react in diverse ways to traumatic experiences, common reactions include those shown in Figure 28.

The ongoing war in Ukraine has had a devastating impact on children's mental health, with an estimated 1.5 million at risk of depression, anxiety, and other issues. Factors such as regular shelling, separation from family and friends, school closures, and exposure to violence (including GBV) contribute to children's deteriorating mental well-being. Children also experience the loss of caregivers or separation from caregivers, leading to long lasting impacts on their psychological and psychosocial wellbeing. In the absence of accessible, safe, and secure spaces (e.g., child-friendly spaces and schools), children will remain isolated from family and/or friends and at intensified risk of abuse, exploitation, neglect, and violence.

Children, particularly young children, are significantly vulnerable to the impacts of war. An estimated 1.5 million children are at risk of depression, anxiety, and post-traumatic stress disorder (PTSD).[286] In frontline areas, roughly 21.6% of children suffer from psychological trauma, 19.7% a lack of access to recreation, 11.3% cannot access education, and 8.8% report sleep disorders.[287] Very young children are more susceptible to wartime trauma. Research suggests that exposure to war can affect brain development in young children.[288] Moreover, young children and infants can sense when their mothers are distressed, which can lead to these children developing long-term fear and anxiety as they grow older.[289] Primary data collection carried out for this project noted that children in ECEC centres have become fearful of aid raids and shelling/bombing, leading to an increased need for mental health support in ECEC settings.[290]

Box 19. The Impacts of the War on Child Mental Health[291]

> A practical psychologist works with children and caregivers. Individual consultations [are] aimed at supporting their psycho-emotional state. The most frequent requests are fears of aid raids…
>
> *Director, Kindergarten in Chernihiv*

The mental health of caregivers has a significant impact on young children's mental health. When children grow up in an environment of mental health illness, the development of their brains may be seriously impacted, damaging their ability to learn and their own physical and mental health later in life.[292] These problems can occur before a children is even born. Depressed women produce higher levels of stress chemicals during pregnancy, which can reduce the growth rate of a baby and increase the risk of premature labour.[293] It is, therefore, imperative that mental health support for parents is also provided. The war in Ukraine has had a significant impact on parents' mental health. A recent study illustrated statistically large increases in anxiety, depression, and loneliness amongst parents.[294] In some cases, these mental health

[283] Bürgin, D., Anagnostopoulos, D., Vitiello, B. et al. (2022). Impact of War and Forced Displacement on Children's Mental Health—Multilevel, Needs-Oriented, and Trauma-Informed Approaches, European Child & Adolescent Psychiatry, doi:10.1007/ s00787-022-01974-z.

[284] U.S. Substance Abuse and Mental Health Services Administration (2018). Behavioral Health Conditions in Children and Youth Exposed to Natural Disasters, accessed: 25 January 2023. https://www.samhsa.gov/sites/default/files/srb-childrenyouth-8-22-18.pdf

[285] Charlson F., van Ommeren M., Flaxman A. et al. (2019). New WHO Prevalence Estimates of Mental Disorders in Conflict Settings: A Systematic Review and Meta-Analysis, The Lancet. 394(10194):240-248. doi:10.1016/S0140-6736(19)30934-1.

[286] UNICEF (2023). War in Ukraine Pushes a Generation of Children to The Brink, Warns UNICEF, accessed: 29 April 2024. https://www.unicef.org/press-releases/war-ukraine-pushes-generation-children-brink-warns-unicef

[287] Protection Cluster Ukraine (2023). Ukraine Protection Analysis Update, June 2023.

[288] Cao, H. et al. (2017). Interparental Conflict and Infants' Behavior Problems: The Mediating Role of Maternal Sensitivity, accessed: 03 April 2024. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5449209/.

[289] Ibid.

[290] Interviews in Chernihiv (2023). Carried out by Partnership for Every Children with the Acting Director of Kindergarten No1, Horodnyansky City Council, December 2023.

[291] Interviews in Chernihiv (2023). Carried out by Partnership for Every Children with the Acting Director of Kindergarten No1 in Horodnyansky City Council, December 2023.

[292] Center on the Developing Child (2009). Maternal Depression Can Undermine the Development of Young Children, accessed: 03 April 2024. https://harvardcenter.wpenginepowered.com/wp-content/uploads/2009/05/Maternal-Depression-Can-Undermine-Development.pdf

[293] Ibid.

[294] Ben-Ezra, M. (2023). The Psychological Consequences of The War in Ukraine: Assessing Changes in Mental Health among Ukrainian Parents, accessed: 03 April 2024. https://osf.io/wg53z

issues have led to an increase in hazardous drinking, increasing the likelihood of women and children becoming victims of domestic violence.[295] The study also found that parents were more likely to experience poor mental health compared to those individuals without children, due to the anxiety caused by having to care for children during a war.[296] This is understandable and raises considerable concerns around the causal effect on child mental health.[297]

The cost of inaction in addressing the mental health needs of children affected by war relates to both the reduced well-being of children and losses in their future earning potential. According to World Vision, if the mental health challenges of children in Ukraine are left unabated, in 15-20 years' time, a large percentage of Ukraine's workforce will be suffering from some form of emotional or mental disorder.[298] By August 2022, the damage to the mental health infrastructure was estimated at USD 1.4 billion.[299] In a global cost-benefit analysis commissioned by UNICEF across 66 countries, the cost of inaction in addressing mental health conditions amongst crisis-affected children was found to be equivalent to USD 203 billion in loss of potential lifetime earnings across the sample countries.[300]

3.2.3.4.2 Providing Mental Health Support to Young Children in Ukraine

Ensuring that children have access to mental health support can be provided in numerous ways. The provision of parenting programmes and home visiting programmes can give caregivers the support they need to provide for their children, while high-quality ECEC centres can be crucial sites for mental health interventions for young children. The following section discusses some of the ways mental health support could be provided in Ukraine, and some of the challenges these interventions face.

ECEC plays a significant role in providing mental health support to children affected by war. A growing body of research has demonstrated that children experiencing violence and instability benefit the most from high quality mental health interventions, whether delivered through home or centre-based ECEC.[301] A large body of epidemiological research done in adults shows that childhood psychiatric disorders tend to persist into adulthood.[302] Mental health support for children in ECEC yields an important benefit of helping to prevent future adulthood psychiatric disorders and interrupts the intergenerational cycle of domestic violence. Apart from protecting the lifetime earning capacity of children in Ukraine, mental health support in early childhood education will also ensure that certain behaviours (e.g., delinquency, criminality, becoming abusive, sociopathic) are mitigated, ensuring safer communities and family structures in post-war Ukraine. Through the Law on Education (2017) and the revised Preschool Act (2019), Ukraine is prioritising inclusive education for all children, including those with complex developmental needs.[303] Some teachers in ECEC settings take courses in providing psychological support to children, which is particularly important given the context of the war.[304] However, other teachers do not have any mental support available in ECEC centres, despite a growing need.[305]

Box 20. Mental Health Support for Children in ECEC Settings[306]

> All teachers have taken courses in psychological support, and help is provided to both children and parents. The most frequently requested problems are fear of shelters and sirens.
>
> *Director, Kindergarten in Dnipropetrovska oblast*

[295] Ibid.
[296] Ibid.
[297] Ibid.
[298] Relief Web (2022). No Peace of Mind: The Looming Mental Health Crisis for The Children of Ukraine. Relief Web. https://reliefweb.int/report/ukraine/no-peace-mind-looming-mental-health-crisis-children-ukraine
[299] Bandura, R. and Reynal, P. (2023). Investing in Mental Health Will Be Critical for Ukraine's Economic Future, accessed: 03 April 2024.
[300] UNICEF (2023). The Global Costs and Benefits of Mental Health and Psychosocial Support Interventions in Education Settings Across The Human Development Nexus. https://www.unicef.org/media/142021/file/Cost-benefit%20analysis%20of%20mental%20health%20and%20psychosocial%20support%20interventions%20in%20schools%20and%20learning%20environments%20in%20emergencies.pdf
[301] Olds, D. (2006). 'The nurse-family partnership. In The Crisis in Youth Mental Health: Critical Issues and Effective Programs', Early Intervention Programs and Policies. Volume 4.
[302] Patton G., Coffey C., Romaniuk H. et al. (2014). The Prognosis of Common Mental Disorders in Adolescents: A 14-Year Prospective Cohort Study, Lancet, 383:1404–11. [PubMed: 24439298]
[303] UNESCO (n.d.). Ukraine – Inclusive Education, accessed: 03 April 2024. https://education-profiles.org/europe-and-northern-america/ukraine/~inclusion
[304] Interviews in Dnipropetrovska (2023). Carried out by Partnership for Every Child, Kindergarten in Synelnkove City Council, December 2023.
[305] Ibid.
[306] Interviews in Dnipropetrovska (2023). Carried out by Partnership for Every Child, Kindergarten in Synelnkove City Council, December 2023.

Parenting programmes can provide mental health support to young children. These programmes can provide caregivers with essential tools to support their children through the war and also ensure parents are given mental health help. This support for parents also has a positive impact on the mental health of young children. Resources, such as the Ukraine Parenting Response initiative, provides practical tips to help parents and caregivers navigate mental health support for themselves and their children.[307] Parenting classes and workshops on positive parenting have been proven to help parents and children living near the frontline. Helping the parents cope significantly increases the likelihood that children will also be able to cope.[308] For parents and caregivers unable to travel, the Poruch project provides bi-weekly online sessions for parents to talk with other parents and professionals about concerns or anxieties they may have.[309]

Inadequate support for parents can negatively impact the mental health of young children. Most parental programmes and the home visiting programme are pilots, meaning that many households across Ukraine do not have access to them. Recent research noted that women in Ukraine are more likely to have increased feelings of anxiety and depression, in part due to increased rates of sexual and gender-based violence since the escalation of the war.[310] These trends are particularly concerning given that women are usually the primary caregivers for children; and, as such, there is an increased likelihood that their mental health challenges could impact their children. The increased likelihood of gender-based violence is also impacting girls at a crucial age where their socio-emotional and cognitive development is likely to be impacted by traumatic experiences.[311]

Ukraine's Home Visiting Programme can provide mental health support to parents and children. Nurses are able to see families for considerably longer than if they were visiting a primary healthcare centre, allowing parents time to ask questions or raise concerns.[312] Visiting families at home also allows nursing staff to be made aware of families who are significantly struggling and may need additional support, and families who may not have otherwise visited a primary healthcare centre.[313]

The Ukraine Child Protection Area of Responsibility (AoR) Strategy 2023-2024 places emphasis on ensuring mental health support for children. To address the long-term impacts of witnessing violence, family separation, displacement, and trauma, all child protection partners in Ukraine have committed to implementing comprehensive Mental Health and Psychosocial Support (MHPSS) programmes to provide specialised support and counselling, helping children and caregivers heal in the face of the ongoing war.[314]

Limited resources for mental health prevent the provision of adequate care. Moreover, the lack of financial and human resources available in Ukraine has limited the treatment options that are available across the country.[315] Psychologists, social workers, and community mental health services are in shortage, and this has been exacerbated by war-related displacement. Child protection programming and GBV response services are affected by an absence of psychologists and social workers in some locations, as most of the social service workforce is no longer present in non-government controlled areas.[316] Ukraine's mental health care system carries a historical legacy of overconcentration of psychiatric institutions (with very limited community mental health services) and a strong mental illness stigma.[317] Authorities and civilians alike have identified an intensified need to assure the availability of experienced, expert psychologists and social workers to address the acute needs of a significant caseload of children in vulnerable situations.[318]

[307] University of Oxford (n.d.). Ukraine Parenting, accessed: 03 April 2024. https://ukraineparenting.web.ox.ac.uk/eng
[308] UNICEF (2023). Amid Conflict, Parenting Classes Offer a Helping Hand in Eastern Ukraine, accessed: 03 April 2024. https://www.unicef.org/ukraine/en/stories/amid-conflict-parenting-classes-offer-helping-hand-eastern-ukraine
[309] UNICEF, Ukraine Ministry of Social Policy (n.d.). Poruch, accessed: 03 April 2024. https://poruch.me/parents
[310] UN Women (2023). In Focus: War in Ukraine is a Crisis for Women and Girls, accessed: 03 April 2024. https://www.unwomen.org/en/news-stories/in-focus/2022/03/in-focus-war-in-ukraine-is-a-crisis-for-women-and-girls; Ben-Ezra, M. et al. (2023). The Psychological Consequences of War in Ukraine: Assessing Changes in Mental Health among Ukrainian Parents, accessed: 03 April 2024. https://osf.io/wg53z
[311] Ibid.
[312] UNICEF (n.d.). Home Nurse Visits Ensure Health Care for Families in Ukraine, accessed: 03 April 2024. https://www.unicef.org/ukraine/en/stories/home-nurse-visits
[313] Ibid.
[314] Ukraine Child Protection AoR Strategy 2023-2024. https://reliefweb.int/report/ukraine/ukraine-child-protection-aor-strategy-2023-2024#:~:text=The%20Strategy%202023%2D2024%20requires,strengthening%20of%20child%20protection%20personnel
[315] Ibid.
[316] Ibid.
[317] Muijen M., McCulloch A. (2019). Reform of Mental Health Services in Eastern Europe and Former Soviet Republics: Progress and Challenges since 2005. BJPsych Int. https://doi.org/10.1192/bji.2017.34
[318] Ukraine Child Protection AoR Strategy 2023-2024. https://reliefweb.int/report/ukraine/ukraine-child-protection-aor-strategy-2023-2024#:~:text=The%20Strategy%202023%2D2024%20requires,strengthening%20of%20child%20protection%20personnel

Greater inter-organizational collaboration is required to ensure young children have access to mental health support. This includes collaborations between ECEC centres, parenting programmes, and home visiting programmes. It is important to consider how mental health services are being provided across these different services to ensure alignment and comprehension. An example is partnerships between ECEC centres and community-based organizations to deliver augmented mental health services.[319]

Box 21. Example: Mental Health Support for IDPs in Bosnia and Herzegovina

A school-based impact evaluation conducted with war-exposed, internally displaced children in Bosnia and Herzegovina was conducted. The treatment group consisted of children receiving 23 group sessions. The sessions covered psychoeducation, therapeutic exposure, cognitive restructuring, stress management-relaxation skills, and practical problem solving. The results of the evaluation revealed that the children's traumatic stress symptoms decreased over time. While there was no control group for this study, it does demonstrate much needed evidence of the impact of mental health support interventions in early childhood education.

Community-based organizations can conceptualise ECEC programmes for children in war settings through consultations with mental health professionals. Some preschools in war-affected countries across the world offer community-partnered school mental health services delivered by staff employed in community-based agencies, often to augment existing behavioural health supports for students. Intensive mental health treatment often takes place during the school day, which can be more time efficient for both students and parents. Increasingly, school-employed staff are enhancing their capacity to deliver specialised mental health treatment for students.[320]

3.2.3.4.3 The Benefits of Good Mental Health in Early Childhood

The benefits of good mental health in early childhood cannot be understated. Evidence suggests that this period builds the foundation for strong mental health in later life.[321] Sound mental health provides an essential foundation for stability that supports all other aspects of human development, such as forming friendships, the ability to cope with adversity, success in school, and later in work and community life.[322] Good mental health in early childhood helps children develop the resilience to cope and respond to challenges throughout their lifetime.[323]

Impact evaluations on mental health prevention and treatment for young children show positive impacts on social-emotional development, parent-child relationships, and a child's ability to deal with adversities. Evidence is still relatively limited in this area, but an initial review classified half of the evaluated programmes as very promising.[324] Studies on school-age children are more common place. One impact evaluation study across six European countries revealed that children receiving mental health support saw an increase in social and emotional competence and a decrease in mental health issues. This programme involved implementing a school-based universal mental health programme for a treatment group and no mental health programme for a control group.[325]

Figure 29. CBR of Investments in Mental Health

Global evidence suggests mental health interventions could have a CBR of 57:1

[319] Hoagwood, K., et al. (2014). 'Mental Health Interventions in Schools 1: Mental Health Interventions in Schools in High Income Countries'. Lancet Psychiatry. Accessed: August 19th 2024. Available here: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4477835/pdf/nihms-685459.pdf.

[320] Ibid.

[321] Center on the Developing Child (n.d.). Early Childhood Mental Health, accessed: 03 April 2024. https://harvardcenter.wpenginepowered.com/wp-content/uploads/2015/05/InBrief-Early-Childhood-Mental-Health-1.pdf

[322] Ibid.

[323] Mental Health Foundation (2021). Children and Young People, accessed: 03 April 2024. https://www.mentalhealth.org.uk/explore-mental-health/a-z-topics/children-and-young-people#:~:text=Children's%20emotional%20well%2Dbeing%20is,well%2Drounded%2C%20healthy%20adults

[324] Graziano, P. et al. (2023). A Systematic Review of Infant Mental Health Prevention and Treatment Programs, accessed: 03 April 2024. https://harvardcenter.wpenginepowered.com/wp-content/uploads/2015/05/InBrief-Early-Childhood-Mental-Health-1.pdf

[325] Bradshaw, C., Zmuda, J., Kellam, S., and Ialongo, N. (2009). Longitudinal Impact of Two Universal Preventive Interventions in First Grade on Educational Outcomes in High School. J. Educ. Psychol. 101, 926–37. doi: 10.1037/a0016586.

The evidence presented illustrates the benefits that accrue to children, their caregivers, and the country when mental health support is comprehensively provided throughout early childhood. This is even more important in the context of the war that Ukraine is experiencing. For a post-war Ukrainian society to be prosperous and rebuild itself, its people must have the mental and emotional capacity to be active citizens. Thus, the return on investment in mental health support is likely to be very significant. In 2022, UNICEF's global cost-benefit analysis on mental health interventions in schools determined that for every USD 1 invested in school-based cognitive behaviour therapy, up USD 57 would be returned.[326] To ensure the development of a prosperous Ukrainian society that people want to return to, investment in mental health support for children and caregivers is imperative.

3.2.3.5 Findings: Benefits of the Home Visiting Programme

Ukraine's Home Visiting Programme, supported by UNICEF, provides families with essential healthcare services such as postnatal visits, vaccinations, and mental health support. The Home Visiting Programme is provided to all families, but may be especially important during the war to reach families who may be unable or unwilling to travel. Unfortunately, it was not possible to model the monetary benefits that could be gained from continuing the Home Visiting Programme as evidence is not available on the long-term impacts nor on how these impacts would translate into economic growth. Moreover, the Home Visiting Program is a form of service delivery rather than an intervention itself. A comprehensive overview of the benefits of continued investment in the Home Visiting Programme can be found below. However, it is important to note that these benefits are not included in the economic evaluation at the end of this section.

3.2.3.5.1 What are Home Visiting Programmes?

Home visiting programmes provide voluntary services and support to families with young children, with the goal of promoting healthy child development and family well-being. These programmes involve training healthcare professionals so they can visit families in their own homes to provide a range of services tailored to each family's needs. The providers may be credentialed or certified professionals, paraprofessionals, or volunteers, but typically they have received some form of training in the methods and topical content of the programme so that they are able to act as a source of expertise and support for caregivers.[327]

The rationale for home visiting programmes focuses on ensuring a child's primary caregiver is effectively supported throughout the early years. As reiterated throughout this Investment Case, the period from conception to age six is paramount; and, usually during this period, the family constitutes a child's primary caregiver. As such, it is essential that these caregivers are given the support and training they need to care for their children appropriately.[328] As home visiting takes place in a family's own environment, home visitors are given a unique insight into a household and are therefore able to witness their challenges and successes.[329] Home visiting also acts as an important mechanism to refer families on to additional services they might need. Home visitors can ensure that households have access to education, health, and child protection services early to mitigate long-term consequences.[330]

Social support can provide caregivers with the tailored assistance they require, thus allowing them to thrive as parents.[331] Challenges facing caregivers, such as trauma, mental health difficulties, and poverty, can have significant impacts on the children they care for, especially during the early years when children are growing and developing rapidly.[332] Home visiting programmes can help connect vulnerable families to existing formal and informal support services, as well as identify the most appropriate support that may be required.[333] The positive impacts on caregivers health and wellbeing are significant, with home visiting programmes from across Eastern Europe and Asia noting a reduction in depression and anxiety, an increase in maternal employment, and improved knowledge of health and wellbeing.[334] Home visiting can empower caregivers to build the stable, responsive environments children need even amidst crises.

[326] UNICEF (2022). The Global Costs and Benefits of Mental Health and Psychosocial Support Interventions in Education Settings across the Humanitarian-Development Nexus, accessed: 03 April 2024. https://www.unicef.org/media/142021/file/Cost-benefit%20analysis%20of%20mental%20health%20and%20psychosocial%20support%20interventions%20in%20schools%20and%20learning%20environments%20in%20emergencies.pdf

[327] Behrman, R. (1999). The Future of Children. Home Visiting: Recent Program Evaluations, Los Altos, CA.

[328] UNICEF ECARO (2017). Regional Recommendations for the Reform of Home Visiting Systems in Europe and Central Asia, Volume One, accessed: 01 May 2024. Available here: https://www.unicef.org/eca/research-and-reports/publications.

[329] Ibid.

[330] Ibid.

[331] Miller, KE. et. al. (2020) Strengthening Parenting in Conflict-Affected Communities: Development of the Caregiver Support Intervention.

[332] UNICEF ECARO (2017). Regional Recommendations for the Reform of Home Visiting Systems in Europe and Central Asia, Volume One, accessed: 01 May 2024. Available here: https://www.unicef.org/eca/research-and-reports/publications.

[333] Ibid.

[334] Ibid.

Research suggests home visiting programmes can also improve parental skills, thus improving child outcomes.Programmes in Eastern Europe noted improved parental knowledge on child nutrition, health care, and education.[335] In the US, parents who were visited by nurses for the first two years were less likely to have children facing injuries or illness.[336] Home visiting programmes can also teach caregivers how to provide a safe, nurturing environment for their children, supporting their autonomy and individual development.[337] These positive developments in parental skills lead to improved child outcomes. Home visiting programmes are associated with reduced morbidity and mortality, better nutrition, and improved cognitive and social development.[338] Moreover, children who have been exposed to home visiting are likely to have more secure attachments to their caregivers, improving their socio-emotional functioning.[339]

All these improvements have wider impacts on society. Better healthcare in early childhood leads to reduced healthcare costs later in life; while children who have been exposed to home visiting programmes are more likely to be ready for formal schooling.[340] Ensuring that caregivers have adequate support also reduces the costs for supporting children who have been abandoned or neglected, leading to better outcomes for disadvantaged or high-risk population groups.[341] Early intervention is paramount, and home visiting programmes can be a cost-efficient way of reducing significant societal burdens in the future.

Globally, home visiting programmes typically fall into two categories: those focused on taking a medical approach for health outcomes, and those focused on parent-child interaction and play/activity-based development. The Home Visiting Programme in Ukraine focuses on prevention and the promotion of healthy habits, rather than on a medial approach. Identifying populations in need may be done at the level of the caregiver (e.g., young mothers, low-income families) or the child (e.g., children with disabilities, those who have lost one or both parents). In some cases, this group may be a specific population, or it may be a whole group of people (such as all parents with new babies). Some programmes may have broad and varied goals, such as improving prenatal and perinatal health, nutrition, safety, and parenting practices. Other programmes may have narrower goals, such as reducing the incidence of child abuse and neglect.[342]

3.2.3.5.2 Why are these programs important in Ukraine?

The impacts of the war have made home visiting programmes a priority in Ukraine. When nurses from the programme visit families at home, they are able to stay for a considerable length of time, answering any questions that the parents might have.[343] In Ukraine, this is often not possible in primary health care facilities where time is short. This makes it easier for nurses to register any concerns they might have about the family, covering issues from mental health to early learning and positive parenting, among others.[344] In the context of the war, the challenges facing families may be more

[335] Ibid.
[336] Ibid.
[337] Ibid.
[338] Ibid.
[339] Ibid.
[340] Ibid.
[341] Ibid.
[342] Michalopoulos C., Faucetta K., Hill C et al (2019). Impacts on Family Outcomes of Evidence-Based Early Childhood Home Visiting: Results from the Mother and Infant Home visiting Program Evaluation, accessed: 16th August 2024. Available here: https://www.acf.hhs.gov/opre/report/impacts-family-outcomes-evidence-based-early-childhood-home-visiting-results-mother-and.
[343] UNICEF (2023). Visiting Nurses Help Young Mothers at Home, accessed: 02 April 2024. https://www-unicef-org.translate.goog/ukraine/stories/nurses-help-new-mothers-at-home?_x_tr_sl=uk&_x_tr_tl=en&_x_tr_hl=en&_x_tr_pto=sc
[343] Ferguson, S. (2023). Visiting Nurses Help Moms and Babies Thrive in Wartime Ukraine, accessed: 02 April 2024. https://www.forbes.com/sites/unicefusa/2023/08/10/helping-moms-and-babies-thrive-in-wartime-ukraine/

complex and are likely to be multi-dimensional. Extended visits to the home can make it easier to recognise problems and ensure families get the support they need. Home visiting is also essential for families who cannot or do not want to travel.[345] Ensuring that nurses can go to mothers means they are less likely to miss out on essential health, nutrition, education, social protection, and development services for themselves and their children.[346]

Ukraine's Home Visiting Programme, known as the Universal Progressive Home Visiting (UPHV) model, is a joint initiative between the Ministry of Health of Ukraine and UNICEF. This universal progressive model provides a basic package of services to all families, with specialised services to some families.[347] Universal support focuses on health promotion, parenting, child development monitoring, and access to additional services.[348] Home visitors monitor families, informing them of relevant services and providing advice when needed. Ensuring that all families have access to a certain number of visits increases the likelihood that more significant concern will be noted in a timely manner. Enhanced and intense services are then provided to some families who need additional help. Once the particular need has been identified, home visitors can help families deal with particularly challenging behaviour, such as difficulties with breastfeeding or mild postpartum depression.[349] These services link families to specialised services, such as counselling and other child welfare services.[350] In particularly complex cases, home visitors can alert social workers to families whose case management needs are extensive.[351] Services are provided as part of primary health care services, but with close collaboration with other services. The Home Visiting Programme extends far beyond healthcare assistance.

Box 22. Testimonial: Benefits of Ukraine's Home Visiting Programme[352]

Mothers who have been forced to flee their home city, such as Valeriia, have emphasised the value of the Home Visiting Programme. Valeriia noted that nurses are always on hand to provide support, even if she just needs someone to talk to. She noted that the programme helped them settle into their new city, while also ensuring that their children received essential health and nutrition interventions.

As of November 2023, over 350 primary care nurses and doctors across multiple regions of Ukraine have been trained on the home visiting model. The programme was first piloted in the Donetska Region in mid-2021. By May 2022, it expanded to the Zhytomyrska, Kirovohradska, and Kyivska Regions. In 2023, the programme was extended to a further seven regions. Home visiting enables health access for families reluctant to travel outside the home due to the war. The programme has been particularly vital for displaced families and in communities absorbing high numbers of internally displaced persons. The home visiting initiative in Ukraine shows promise as an effective model for delivering a range of services to vulnerable families in a time of war. Existing infrastructure and relationships, such as with nurses and social workers, have been used to make this process as efficient as possible. By reaching families in their own environments, the Home Visiting Programme is able to encourage good healthcare and nutrition for young children, as well as early learning, parental wellbeing, and parental competencies.[353] Working closely with other sectors and programmes, such as Better Care, means that challenges within families can be identified quickly, and children can be referred on to the relevant services.[354]

Home visiting programmes can mitigate the highly harmful impacts of stress on long term outcomes. There is robust evidence that compromised parenting stemming from persistently high stress can significantly influence psychosocial wellbeing.[355] Traumatic experiences in early childhood can have lifelong impacts on physical and mental health. Children with two or more highly adverse experiences are more likely to repeat a grade.[356] Thus, home visiting programmes can

[345] UNICEF Ukraine (2023). Nurses Continue to Visit Families in The Frontline Areas, accessed: 02 April 2024. https://www.youtube.com/watch?v=6XxZwSQwUQE&list=PLJ2-31j4oXT7fQODrfNhgEEHDjbS3clGe&index=5
[346] Ibid.
[347] Jovic, A. (2024). Universal Progressive Home Visiting in Europe and Central Asia: Overview of the model and key lessons learned, UNICEF, accessed: 01 May 2024.
[348] Ibid.
[349] Ibid.
[350] Ibid.
[351] Ibid.
[352] Ferguson, S. (2023). Visiting Nurses Help Moms and Babies Thrive in Wartime Ukraine, accessed: 02 April 2024. https://www.forbes.com/sites/unicefusa/2023/08/10/helping-moms-and-babies-thrive-in-wartime-ukraine/
[353] Jovic, A. (2024). Universal Progressive Home Visiting in Europe and Central Asia: Overview of The Model and Key Lessons Learned, UNICEF, accessed: 01 May 2024.
[354] Ibid.
[355] Miller, KE., et. al. (2020). Strengthening Parenting in Conflict-Affected Communities: Development of The Caregiver Support Intervention.
[356] Kelley, G., et al. (2022). Impacts of Home visiting Programs on Young Children's School Readiness.

mitigate the effects of toxic stress, enhancing parenting skills and creating more gender-responsive and positive early childhood experiences.[357] Research points to the importance of targeted home visiting programmes to families who are experiencing chronic stress; Home visiting programmes can also help first time mothers at risk for anxiety, GBV, depression, and stress significantly reduce their level of symptoms.[358]

Home visiting services can also be used to as a pathway to create appropriate referrals to other existing community services (e.g., preschool programmes), and to offer a low-cost universal approach that increases the chances of early school success, which may be relevant for Ukraine in its efforts to recover and boost enrolment rates post war.[359] A comprehensive approach to home visiting as a part of a broad early childhood system has been identified as an effective strategy to help close the gap in school readiness and child well-being associated with poverty and early childhood adversity.[360] Working closely with the Better Care programme, the Home Visiting Program in Ukraine can refer families to the relevant social protection and child protection services, reducing the likelihood of child neglect or that children will end up in institutional care.[361] This 'one shop' approach is currently being piloted in the form of the Resilience + Centres, which offer a range of social services for positive parenting, crisis intervention, and early childhood interventions.[362] Plans are in place for resilience centres to offer support tailored to the needs of individual communities, thus closely aligned with the objectives of the Home Visiting Programme.[363]

There is scope for Ukraine to expand its Home Visiting Programme, potentially increasing the benefits that could be gained. There are lessons to be learnt to ensure that a scale-up is as effective as possible. These include ensuring that families are targeted with the needed level of support and that the desired outcomes are tailored to the needs of different communities.[364] It is also paramount that a comprehensive, well-trained workforce is available with the resources and capacity to work effectively.[365] The continued development of cross-sectoral coordination at the national and local level is important.

Box 23. Case Study – The impact of UPHV in Kazakhstan[366]

The Universal Progressive Home Visiting model in Kazakhstan has made significant positive impacts. Evaluations of the programme noted an increase in exclusive breastfeeding practices from 47% to 66%, as well as an increased understanding of the importance of breastfeeding amongst families. Active health-seeking behaviour among parents and caregivers increased, and there was a reduction in unnecessary health service consultations by 13%.

The programme also noted an increase in the identification of children with disabilities and developmental difficulties, and improved awareness amongst caregivers of developmental milestones. Overall, the evaluation determined that parenting skills had improved, which led to an overall improvement in early childhood development. The model also helped develop a more cross-sectoral approach to ECD, with a shift to assessing the system as a whole.

3.2.3.6 Findings: Total Monetary Benefits

These improved health and development outcomes have a high economic, as well as social, value. As aforementioned, it was not possible to monetise all the benefits related to the scale-up of these interventions. However, the evaluation that was possible reveals the immense economic contribution these investments in young children could bring. This section illustrates the monetary benefits of the interventions that **could be costed.** Monetary benefits of the Home Visiting Programme and mental health care for children are **not** included in this section. Table 17 reports on these findings; all figures reported have been discounted to account for the net present value of resources in the future. In total, it is estimated that

[357] McKelvey, LM. et al. (2016). Assessing Adverse Experiences from Infancy Through Early Childhood in Home Visiting Programs.
[358] Vismara, L. (2020). Reflective Parenting Home Visiting Program: A Longitudinal Study on The Effects upon Depression, Anxiety and Parenting Stress in First-Time Mothers.
[359] Ibid.
[360] Sandstrom, H. (2019). Early Childhood Home visiting Programs and Health.
[361] Jovic, A. (2024). Universal Progressive Home Visiting in Europe and Central Asia: Overview of The Model and Key Lessons Learned, UNICEF, accessed: 01.05.2024.
[362] UNICEF (2024). Resilience Centers set up to support families in the Kharkiv region, accessed: 01.05.2024. Available here: https://reliefweb.int/report/ukraine/resilience-centres-set-support-families-kharkiv-region-enuk.
[363] Ibid.
[364] Jovic, A. (2024). Universal Progressive Home Visiting in Europe and Central Asia: Overview of the model and key lessons learned, UNICEF, accessed: 01.05.2024.
[365] Ibid.
[366] Ibid.

improving health and nutrition could lead to gains of UAH 77 billion in the slow scenario. This amount would increase if coverage was scaled up faster, reaching UAH 107 billion in the medium scenario and UAH 144 billion in the fast scenario. This is the equivalent of 1.3-2.4% of the entire GDP of Ukraine in 2024.[367] These benefits would be felt over a medium to long-time period, as those who additionally benefit from the interventions are able to survive and thrive. For children receiving interventions today in their earliest years, these benefits may continue to be felt for decades to come.

Table 17. Monetised Additional Benefits under Fast, Medium, and Slow Scenarios, in UAH Billions, Discounted at 5%

Fast	Medium	Slow
144	107	77

3.2.4 Economic Evaluation

Significant economic benefits will be foregone if investments in early childhood health and development are not made. The cost of inaction for failing to scale up these services is between UAH 68 billion and UAH 128 billion, depending on the scenario (Table 18). This figure is calculated by determining the total additional economic benefit of a scale-up scenario (compared to the baseline), less the costs of the scale-up. As these findings show, while the additional costs of scaling up are higher with the faster scenarios, so are the benefits. For this reason, there is a need to scale up coverage as quickly as possible to minimise the opportunity costs related to poor health and development in the early years.

Table 18. Economic Benefits, Costs, and Cost of Inaction for the Fast, Medium, and Slow Scale-up Scenario, in UAH Billions, Discounted at 5%[368]

	Fast	Medium	Slow
Total Costs	16	12	9
Total Benefits	144	107	77
Cost of Inaction	**128**	**95**	**68**

Spending on health and development interventions for the early years is also a strong investment decision. This analysis has found that the return on investment is around 9:1. This means that for every 1 UAH invested, around 9 UAH would be returned (Figure 31).

Figure 31: The Expected Rate of Return on every UAH 1 Invested for the Fast, Medium, and Slow Scale-up Scenarios.

Given the war and demographic challenges in Ukraine, it is imperative Ukraine makes investments in health and development. These investments will help to stimulate economic growth in coming decades, which will be critical for Ukraine in the aftermath and recovery of the ongoing war. These investments are now more important than ever as children and their families experience a healthcare system damaged by war and an increased burden of disease (especially related to mental health and developmental delays). Further, supporting the development of a healthy, prosperous future working-age population is essential given Ukraine's aging population. A strong, family-focused health and development system could be key to pulling refugees to return after the war.

[367] Based on the assumption that the GDP of Ukraine in 2024 is USD 186 billion. IMF (2024). Ukraine, IMF Data Mapper.
[368] Please note that the benefits of mental health and the home visiting programme are not included in these calculations.

Box 24. Health and Nutrition

Investing in health and nutrition interventions in Ukraine will help ensure that the children of today grow up to be successful working-age adults who support the development of a prosperous Ukraine. Investment now will also help create a society that people want to return to following the end of the war, as they will want a healthcare system that supports them and their children. Showing a dedication to healthcare for children and caregivers will also support Ukraine in its accession to the EU.

3.3 Social Protection and Child Protection

3.3.1 Overview

Social protection and child protection interventions are imperative to help develop a prosperous future for young Ukrainians. Children who grow up in family-based care where both parents and children are properly supported are more likely to grow-up to become well-acclimatised, successful adults. These working-age adults are more likely to make a bigger contribution to the Ukrainian economy, supporting its post-war recovery and economic growth. A strong social protection and child protection system is also more likely to encourage Ukrainian families to return, most notably young women who have left the country with their children. A comprehensive system of support for both parents and children is likely to make families feel more confident about returning.

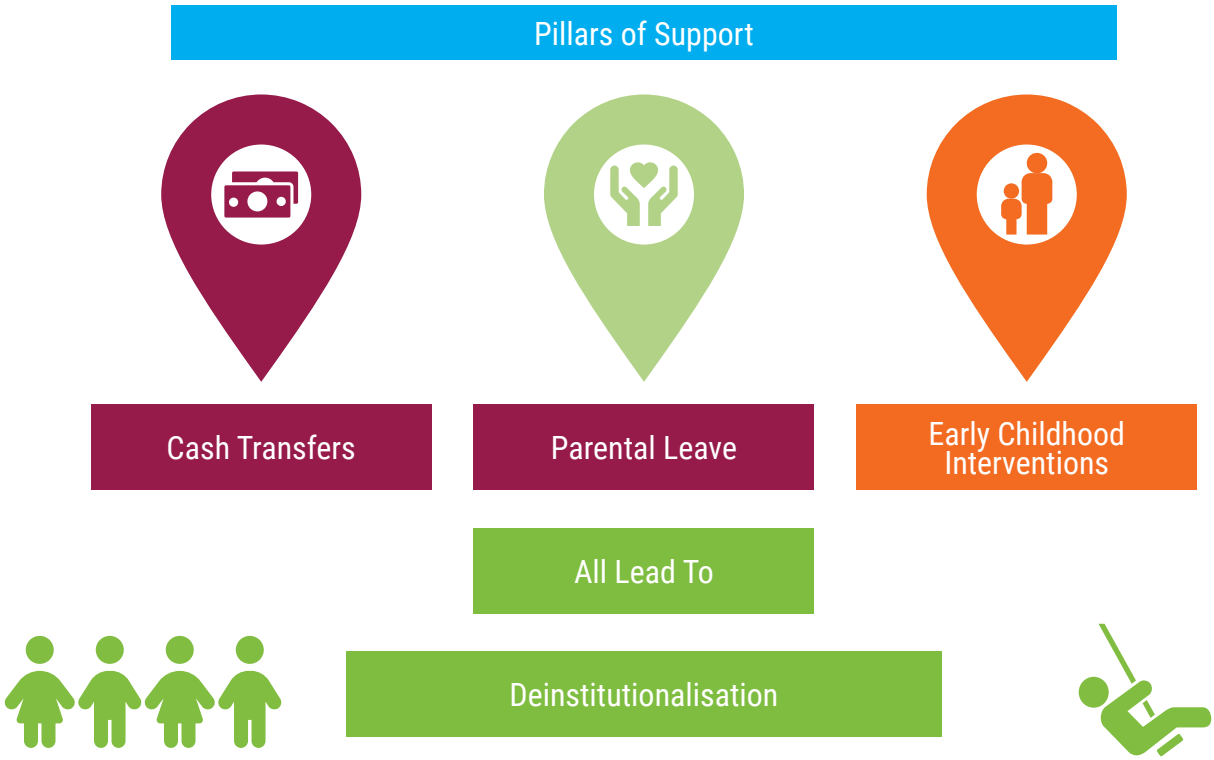
An analysis of the social protection and child protection package has delivered several key messages. Here is an overview of the key messages (Box 25):

Box 25. Key Findings for Social Protection and Child Protection

- Scaling up the coverage of cash transfer programs could accrue monetary benefits of over **UAH 800 billion** between 2023 and 2050 in the fast scale-up scenario. The cost of inaction of not investing is **over UAH 450 billion**. This investment will also have **positive impacts on education and health outcomes.** During the war, cash transfers have been helping families purchase essential items.
- Increasing the paid parental leave allowance will **increase the number of women entering the labour market**, while also **reducing childcare costs** in the first six months. This investment will ensure that primary caregivers (mainly women) have the childcare support required from the birth of their child.
- Deinstitutionalisation could produce monetary gains of over **UAH 400 billion** by 2050 in the fast scale-up scenario. The cost of inaction is over **UAH 360 billion**. Family-based care improves a **child's emotional, social, and cognitive development, as well as health and education outcomes**. There would also be significant **cost savings** from reducing institutional care due to its current expense. Deinstitutionalisation **will also support Ukraine in its accession** into the European Union.
- Parenting programs can improve a range of ECD outcomes including **language development, cognitive ability, and socio-emotional development.** They also provide additional support for parents, such as **mental health support.** This additional support is especially important during, and after, the war.

The social protection and child protection package modelled below focuses on providing a comprehensive system of family-based care through care reform. Therefore, it looks at reducing rates of institutionalisation, while advocating for care reform and expanding family-based support. The research is clear about the benefits of family-based care, and it is also clear about the damaging impacts of institutionalisation. Not only is family-based care better for children, but moving away from institutionalisation will also support Ukraine's EU Accession process. The figure below illustrates the three key pillars of family-based care: cash transfer programmes, comprehensive care policies, and early childhood interventions. The consensus behind this Investment Case is to ensure all three pillars are strong and comprehensive, which should prevent children from needing institutional care.

Figure 32. The Social Protection and Child Protection Landscape



This Investment Case examined a package of key interventions to provide comprehensive social protection and child protection. As previously stated, it has not been possible to quantifiably model all of these interventions. For most interventions, the costs and monetary benefits have been modelled. However, the monetary benefits could not be modelled for parenting support programmes, and therefore these have been excluded from the economic evaluation. This is because the long-term benefit data is not available to accurately be able to predict the long-term monetary impacts of some interventions. Nevertheless, the benefits of these interventions are discussed i this section.

Table 19 depicts the interventions that have been modelled throughout this Investment Case, highlighting which interventions have been included in the economic appraisal and which have not. The baseline coverage data and target coverage points have also been included in the table. Additional information on these coverage points can be found in the footnotes.

Table 19. Interventions Modelled in The Social Protection and Child Protection Package

Intervention	Pillar of Support	Evaluation Method	Baseline Rate	Target Rate
Reducing rates of institutional care	Early childhood intervention	Economic Evaluation, Literature Review, Primary Data Collection	1.08% of children	0.00% of children
Universal Birth Grant	Cash transfer	Economic Evaluation	7.80% of a household's average monthly consumption	20% of a household's average monthly consumption[369]
Cash transfers for children under six with disabilities	Cash transfer	Economic Evaluation	20% of children under six with disabilities[370]	100% of children under six with disabilities
Cash transfers for children under six living in large families (more than six people)	Cash transfer	Economic Evaluation	57% of children under six living in large families	100% of children under six living in large families

[369] The Universal Birth Grant already covers all households in Ukraine. This Investment Case looked at increasing the value of the cash transfer to reach 20% of an average household's monthly consumption. This amount was calculated using assumptions about average household expenditure in Ukraine.

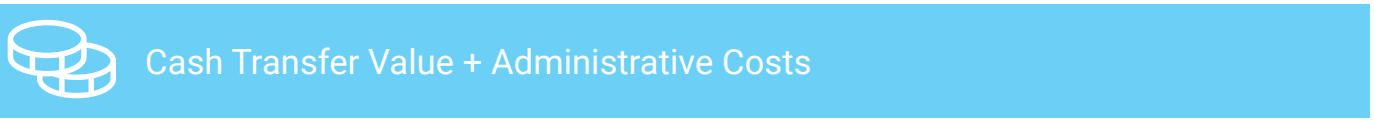
[370] For cash transfers, the numbers of children covered were provided by the MoSP. The baseline coverage was calculated by using assumptions around the percentage of children with disabilities or without parental care. For example, the assumption that 6% of children in Ukraine have disabilities was used. The baseline figure provided by the MoSP was 20% of 6% of children under the age of six in Ukraine.

Intervention	Pillar of Support	Evaluation Method	Baseline Rate	Target Rate
Cash transfers for children under six without parental support	Cash transfer	Economic Evaluation	20% of children under six without parental care	100% of children under six without parental care
Paid maternity leave	Care policies	Economic Evaluation	126 days of paid leave, 70 days prepartum	180 days paid, taken at any point[371]
Paid paternity leave	Care policies	Economic Evaluation	0 days of paid paternity leave	14 days of paid paternity leave
Parenting support programmes	Early childhood intervention	Literature Review & Primary Data Collection (NB: no costing or benefit estimation)	N/A	N/A

3.3.2 Cost Estimates

3.3.2.1 Methodology

The costs of scaling up social and child protection were estimated across different interventions. The Investment Case analysed the costs of scaling up cash transfer and paid maternity/ paternity leave programmes, and the costs of steadily reducing the number of children in institutional care and providing families with additional financial support instead. The paid parental leave that has been modelled is the allowance given to parents upon the birth of a child, not the unpaid leave that can be taken up until a child is three years old. These costs were captured across three different models. As such, the report illustrates the costs of the different interventions separately to begin with, before providing an overview of the additional costs required to scale up the social protection package.



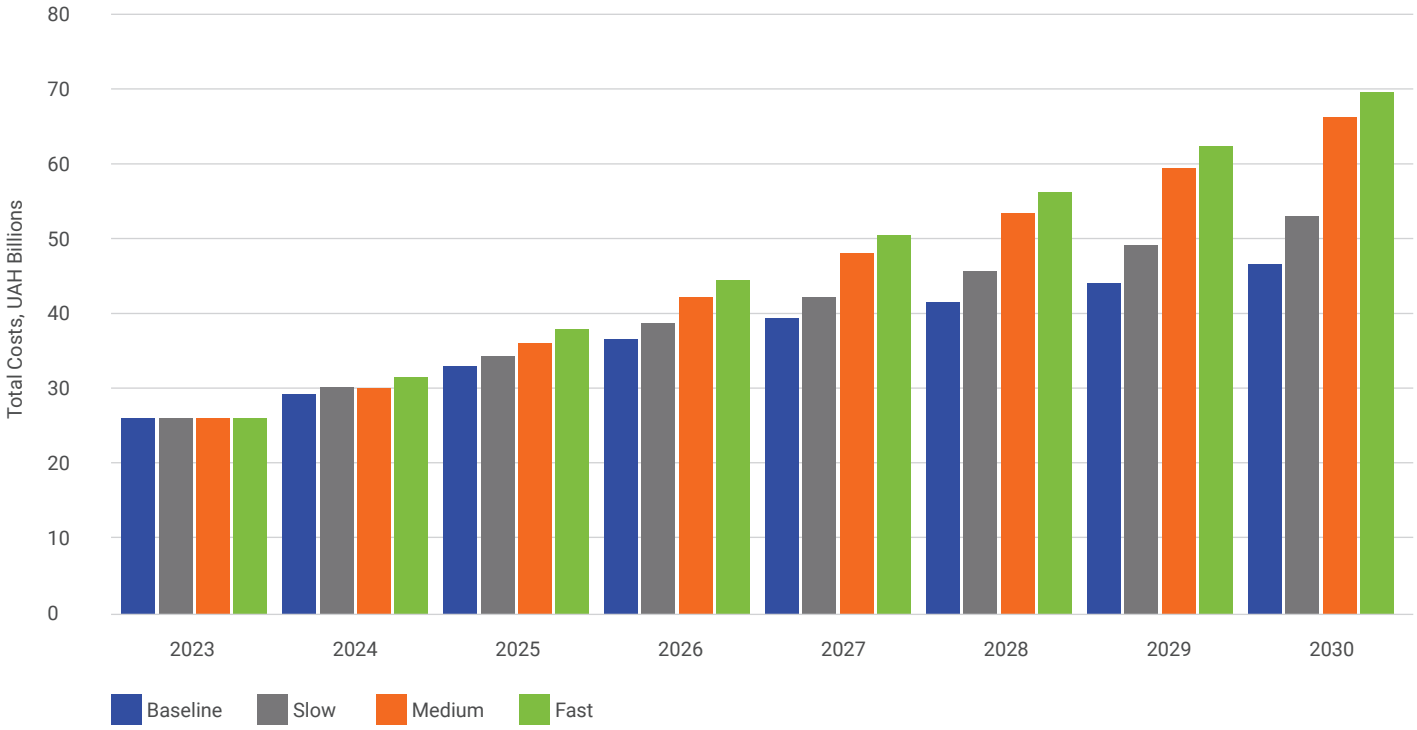
3.3.2.2 Findings: The Cost of Scaling up Cash Transfers

The costs of scaling-up cash transfer programmes under the fast, medium, and slow scenarios were estimated. High level costing estimates were collected across all four cash transfers that were modelled. This included scaling up the value of the Universal Birth Grant and scaling up the coverage of cash transfers for large families with children under six, for children under six with disabilities, and for children under six with no parental care. For each cash transfer, the value of the cash transfer and administrative costs were inputted into a costing model. An assumption was made based on an in-depth literature review that administrative costs would amount to 1.2% of the value of the cash transfer. Using the value of the cash transfer and administrative costs, a cost per beneficiary was determined. These costs were scaled up over the time horizon, accounting for inflation and discounted at a rate of 5%.

Costs were then modelled across the time horizon for all three scenarios. Across the twenty-six-year scale-up period, costs are expected to be highest under the fast scenario, followed by the medium scenario, and then the slow scenario. This is a result of the faster scale-ups which facilitate a larger number of Ukrainian children being covered by cash transfers. Figure 33 below illustrates the total annual costs of scaling up cash transfers between 2023-2030. These costs are undiscounted.

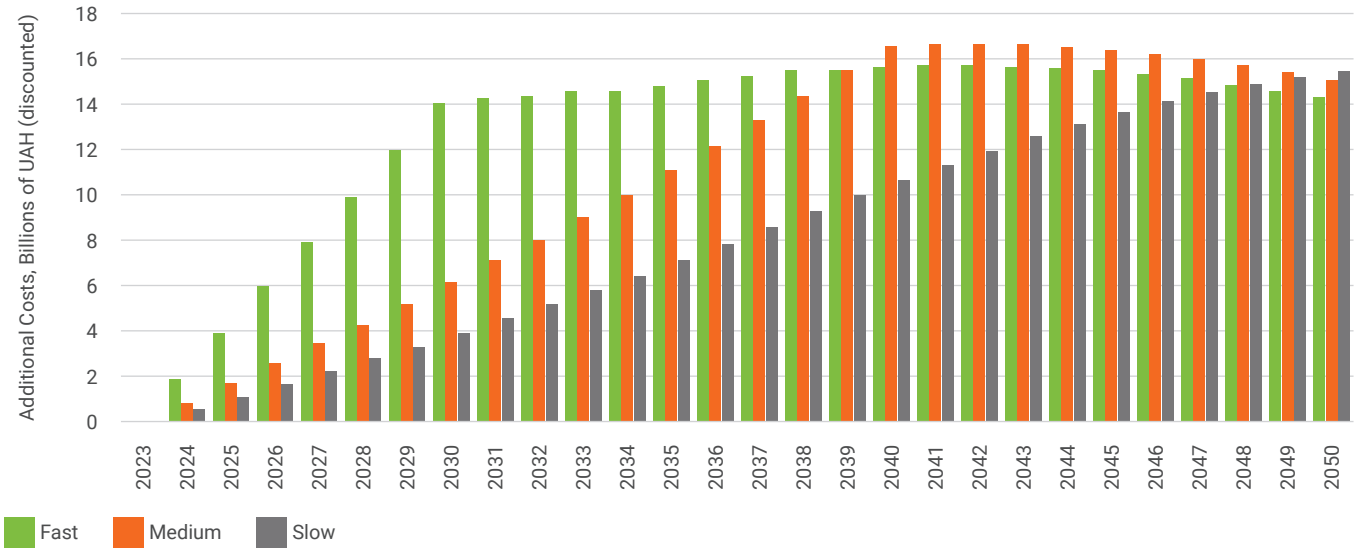
[371] The Investment Case models maternity leave that can be taken at any time. For example, all 180 days could be taken after the birth of the child. This is not currently the case in Ukraine.

Figure 13. Total Undiscounted Annual Costs of Providing ECEC Services Under Each Scenario (Baseline, Slow, Medium, Fast), 2023-2030



Across all three scenarios, additional costs will be required above the baseline amount. These costs are higher for the medium and fast scenario, when compared to the slow scenario, due to the additional number of children being covered by cash transfers. Figure 34 illustrates the additional annual costs that will be required across all three scenarios. It highlights this variation in annual costs incurred across the three scenarios and indicates the discounted costs of increasing coverage for cash transfer interventions.

Figure 34: Additional Annual Costs for All Three Scale-Up Scenarios from 2023 to 2050, in UAH Billions, Discounted at 5%



The total costs of proposed interventions will be significant, although viewing costs in per child terms allows for a proportionate understanding of the investment required. Table 20 presents a summary of these incremental costs, discounted at a rate of 5%. For the slow scenario, the cost per child ranges from an average of UAH 95,585 in the first six years to UAH 291,114 in the last six years. The fast scenario is slightly more expensive due to covering more children in these scenarios, with cost per capita ranging from an average of UAH 93,936 in the first six years to UAH 392,784 in the last six years.

Table 20. Total Costs for Fast, Medium, and Slow Scale-Up Scenarios, across Different Time Horizons, in UAH, Discounted at 5%

	2023-2030	2031-2040	2041-2050	2023-2050
Fast				
Average Cost Per Capita over Time Horizons	93,936	179,744	292,784	337,252
Average Annual Cost (UAH Billions)	11.3	28.3	46.2	49.8
Total Cost for The Period (UAH Billions)	296	738	1,203	1,295
Medium				
Average Cost Per Capita over Time Horizons	93,685	179,853	294,408	337,749
Average Annual Cost (UAH Billions)	10.1	26.3	47.2	47.5
Total Cost for the Period (UAH Billions)	261	685	1,226	1,235
Slow				
Average Cost Per Capita over Time Horizons	93,585	179,163	291,114	337,060
Average Annual Cost (UAH Billions)	9.7	23.7	44.7	44.3
Total Cost for The Period (UAH Billions)	252	618	1,163	1,154

Women in Ukraine are entitled to **126 days of paid leave** around the birth of a child. However, **70 days** must be taken **before the child is born**.

There is **no** paid paternity leave. Fathers are entitled to **two weeks unpaid leave**.

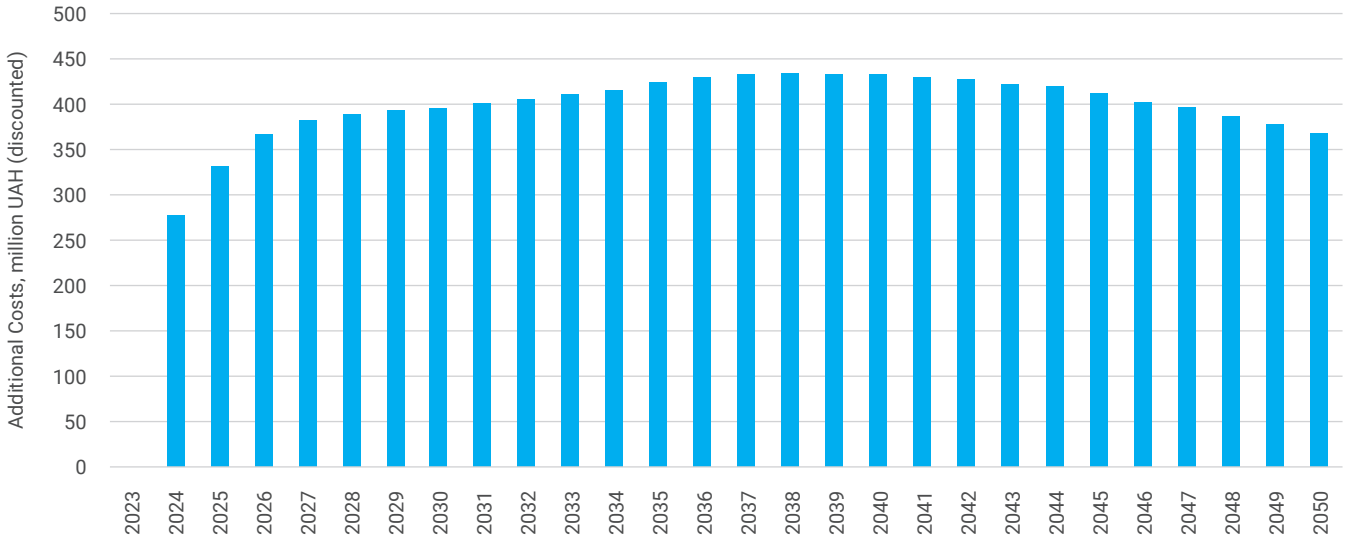
3.3.2.3 Findings: Total Monetary Benefits

Scaling up parental leave was also modelled as part of the social protection package. Only one scenario was modelled for parental leave: increasing the expansion of maternity and paternity leave entitlements, in line with international standards. Scaling up maternity leave to **180 days of paid leave** was modelled, as is in line with international standards. Scaling up paternity leave to **14 days of paid leave** was also modelled. Scaling up maternity leave means that women would have paid support until their baby is six months old. After this, the child can enter an ECEC service, where they can stay until they join primary school. This model allows women to go back to work after six months and ensures families are financially secure throughout. The most significant increase in costs was between 2023 and 2024, when the entitlement to parental leave was first scaled up. Costs will begin to stabilise in the 2040s as the number of new parents benefitting decreases (due to demographic changes). Figure 35 shows the annual discounted incremental costs of increasing maternity and paternity leave. It highlights this variation in annual costs incurred in the scenario and indicates the discounted costs of increasing the duration of parental leave.

Box 26: Methodological Approach: How Were The Costs of Parental Leave Policies Calculated?

Costing of parental leave was also undertaken on Excel and reported separately to the costs of other social protection interventions in the package. The model assumed that parents would be paid the average wage for Ukraine and then estimates how many parents would be eligible for paternity and maternity leave in each year of the study time horizon. It is assumed that all parents take up the entitlement. The model calculates the additional intervention cost of providing the leave entitlements for more days than under the existing policy. Programmatic costs of administering the leave entitlement are not accounted for.

Figure 35. Additional Annual Costs across the Scale-Up Scenario, from 2023 to 2050, in UAH millions, Discounted at 5%



While the proposed total costs of scaling up parental leave are substantial, considering costs in per beneficiary terms allows for a proportionate understanding of the investment required. Table 21 presents a summary of these incremental costs, discounted at a rate of 5%. The cost per beneficiary of scaling up parental leave ranges from an average of UAH 4,487 in the first six years to UAH 4,080 in the twenty-six-year period modelled. Costs for maternity leave are higher, because it lasts longer than paternity leave. The discounted costs per beneficiary for maternity leave range from an average of UAH 8,464 across the first six-years of the study to UAH 7,847 across all twenty-six-years. In comparison, the per beneficiary costs of paternity leave range from UAH 1,457 across the first six-years to UAH 1,342 across the twenty-six-year period.

Table 21: Total Costs for the Scale-Up, across different time horizons, in UAH, Discounted at 5%

	2023-2030	2031-2040	2041-2050	2023-2050
The Scale-Up Scenario				
Average Cost Per Capita over Time Horizons (Parental Leave) (UAH)	4,487	4,398	4,398	4,080
Average Cost Per Capita over Time Horizons (Maternity Leave) (UAH)	8,464	8,296	8,296	7,847
Average Cost Per Capita over Time Horizons (Paternity Leave) (UAH)	1,457	1,428	1,428	1,342
Total Cost Per Period (UAH Billions)	2.5	4.2	4.1	10.8

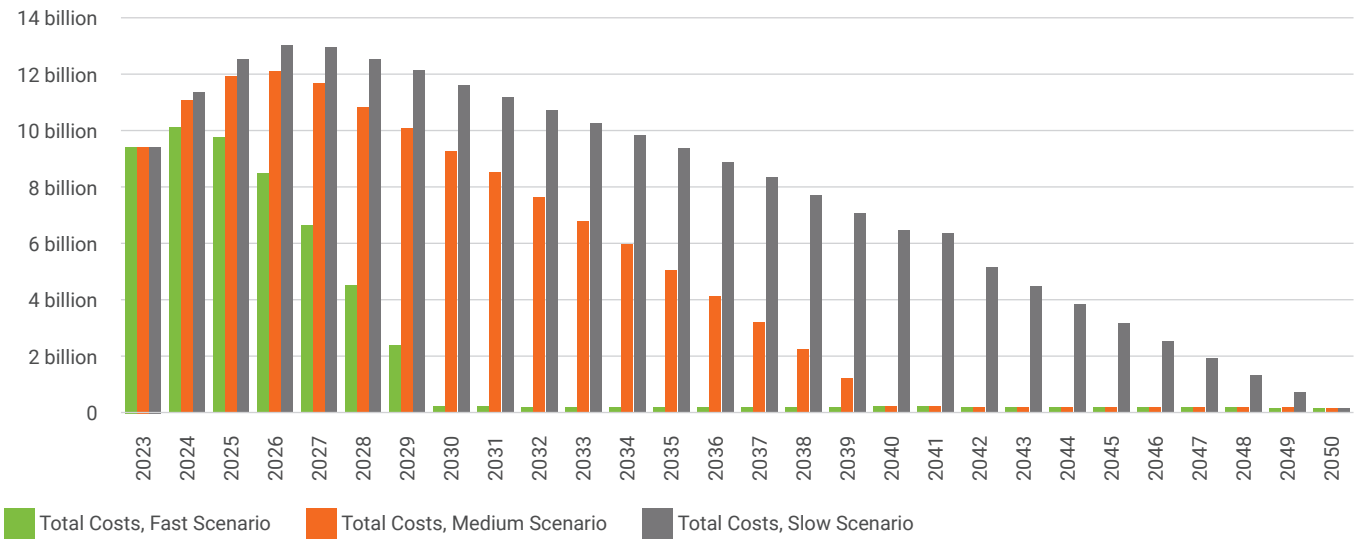
3.3.2.4 Findings: Costing Care Reform

The costs of reducing institutional care, one key component of care reform, were modelled across the fast, medium, and slow scenarios. To ensure the success and realisation of reducing institutional care, partial costs of providing alternative care to children were also calculated. This involved gradually reducing the children in institutional care and providing financial support for alternative care instead. Additional costs, such as scaling up services for alternative care families, were not included in this model. Due to the significant costs associated with institutional care, cost savings were estimated and will be discussed in the benefits section of this analysis. Figure 36 below highlights the total costs of providing alternative care to children as institutionalisation is scaled down. These costs are presented annually and are discounted at a rate of 5%. As previously stated, these costs are lower than the baseline costs due to cost savings made from deinstitutionalisation, therefore additional costs are not presented. Thus, the figure includes both the costs of providing the grant and the continuing costs associated with institutional care. Costs reduce over time as institutionalisation is scaled down, because providing support for alternative care is much more cost-effective.

Box 27: Methodological Approach: How Were the Costs of Deinstitutionalisation Calculated?

- Investing in WASH interventions could generate significant economic gains for Ukraine. In the fast scale-up scenario, the economic benefits could reach nearly UAH 245 billion between 2023 and 2050. Meanwhile, the cost of inaction is expected to reach almost UAH 32 billion.
- Investments in WASH interventions are likely to generate efficiency savings across the health sector. By 2050 in the fast scale-up scenario, it is estimated that UAH 143 million would be saved due to the long-term health benefits of a strong WASH system.
- The health benefits of investments into WASH interventions could also lead to a significant increase in parents' time, allowing them to spend time on activities that will lead to economic growth. It is estimated that nearly UAH 12 billion could be generated from time saved for parents between 2023 and 2050.
- The benefits of good WASH extend far beyond what was able to be modelled in this Investment Case. The benefits are also likely to be substantial across society, rather than just impacting children under six.
- These benefits are paramount for Ukraine given the ongoing effects of the war, which has impacted access to WASH facilities. Not only will investments in WASH have long-term benefits, but they are also likely to make Ukraine a more stable and prosperous country, encouraging people to return.

Figure 36: Annual Total Costs of Reducing Institutional Care and Replacing with a Foster Care Grant, across the Fast, Medium, and Slow Scenarios, in UAH billions, Discounted at 5%



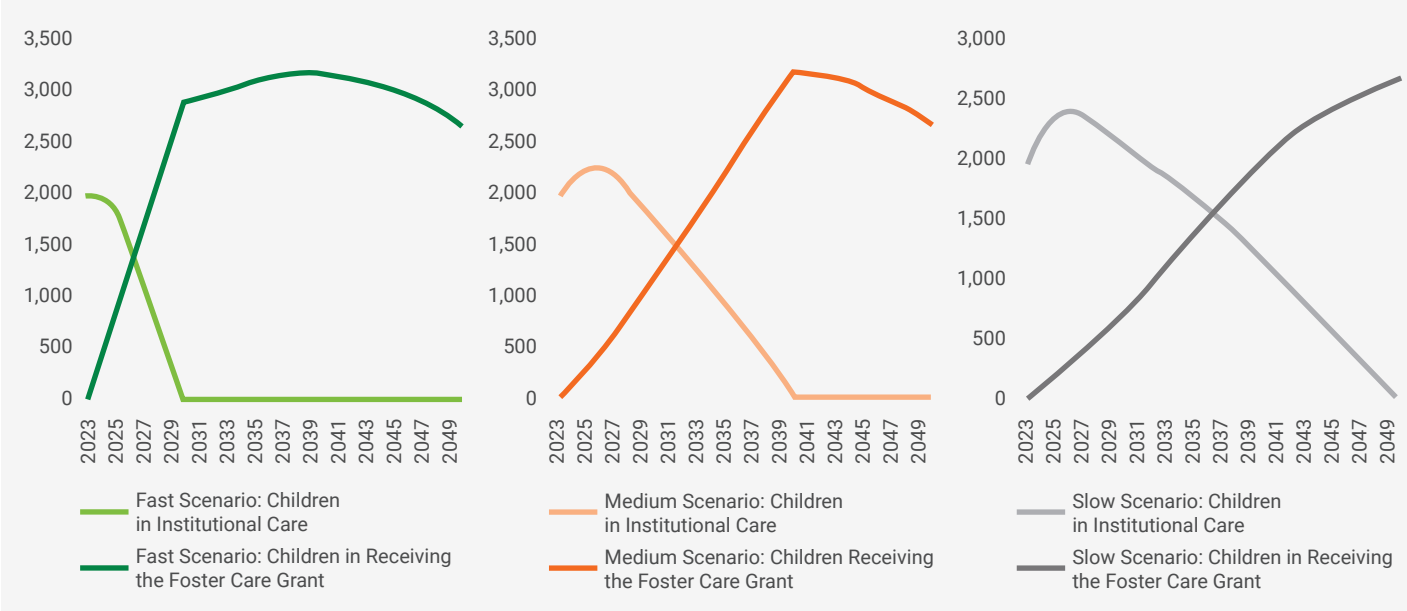
The total cost of the deinstitutionalisation is significantly cheaper than the current expenditure. Moreover, these costs decrease significantly over time. In the fast scenario, the average cost per year is UAH 7 billion over the first six years, then dropping to UAH 1.8 billion across the whole-time horizon. In the slow scale-up scenario, the costs are significantly higher due to children leaving institutional care at a slower rate. In this scenario, between 2023-2030, the average annual costs are UAH 14 billion, which decreases to an average annual cost of UAH 7.9 billion across the whole-time horizon. Table 22 depicts these total costs across the three scenarios. Care reform involves additional costs, such as providing additional services like parenting programmes, which could not be modelled and may require higher initial outlays. However, the significant costs of institutional care are still expected to be significantly higher, particularly over time.

Table 22. Average total cost per year for deinstitutionalization for the Fast, Medium, and Slow Scenarios, in UAH, Discounted at 5%

	2023-2030	2031-2040	2041-2050	2023-2050
Fast				
Average Annual Cost (UAH Billions)	7	0.3	0.3	1.8
Total Cost for the Period (UAH Billions)	51.4	2.4	2.3	56.2
Medium				
Average Annual Cost (UAH Billions)	12.3	5.1	0.3	5.1
Total Cost for the Period (UAH Billions)	86.4	45	2.3	133.7
Slow				
Average Annual Cost (UAH Billions)	14.3	9.9	3.3	6.7
Total Cost for the Period (UAH Billions)	95.4	89.8	29.3	214

These costs lead to tangible reductions in the number of children in institutional care. The graphs below illustrate the decrease in the number of children in institutional care and the increase in the number of children receiving a foster care grant. This reduction and increase happen most quickly in the fast scenario, but significant improvements in rates of institutionalisation can be seen across all three scenarios.

Figure 37: The Number of Children Leaving Institutional Care across all Three Scenarios



3.3.2.5 Findings: Costing Care Reform

The costing detailed above forms the basis of a social and child protection package to cover a child's early years. It is important to consider the total costs of the social protection package in order to gain a clearer understanding of the costs required to fund scale-ups across the sector. Figure 38 illustrates the total costs, per year, which will be required to fund the scale-up of the social protection package. These costs include the funding required to scale up cash transfers and parental leave, and the costs required to provide additional financial support to families of children leaving institutional care. The total costs, rather than the additional costs, have been portrayed. This is because the cost savings associated with deinstitutionalisation are so significant that there are no additional costs required for these interventions. They can be funded wholly by the cost savings made. The figure below portrays the total costs, which includes the baseline costs, (those families already benefitting from interventions are already covered by the Ministry of Social Policy) for each year. As there is only one scale-up scenario for parental leave, these costs are the same across the three scenarios.

The total costs required are slightly higher in the fastest scale-up scenario. Between 2023 and 2030, **UAH 423 billion** will be required to fund the package, rising to **UAH 1,543 billion** between 2041 and 2050. In comparison, in the slowest scale-up scenario, **UAH 411 billion** will be required between 2023 and 2040, rising to **UAH 1,528 billion** between 2041 and 2050.

Figure 38. The Total Costs Required for the Social Protection and Child Protection Package across All Three Scale-Up Scenarios, in UAH Billions, Discounted at 5%

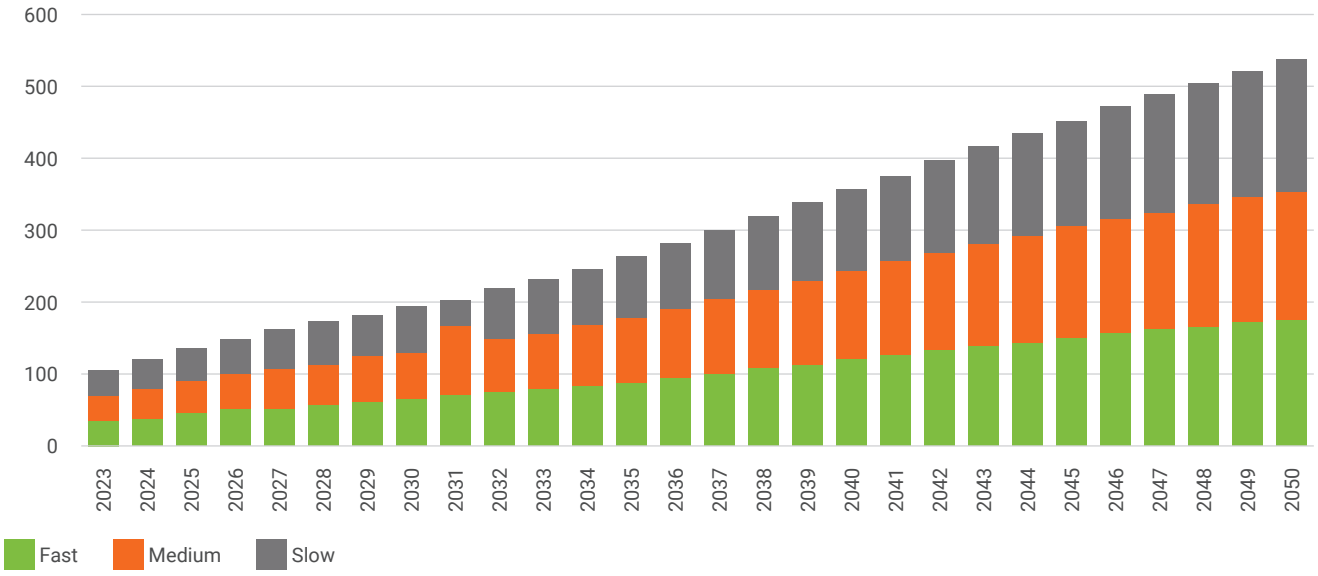
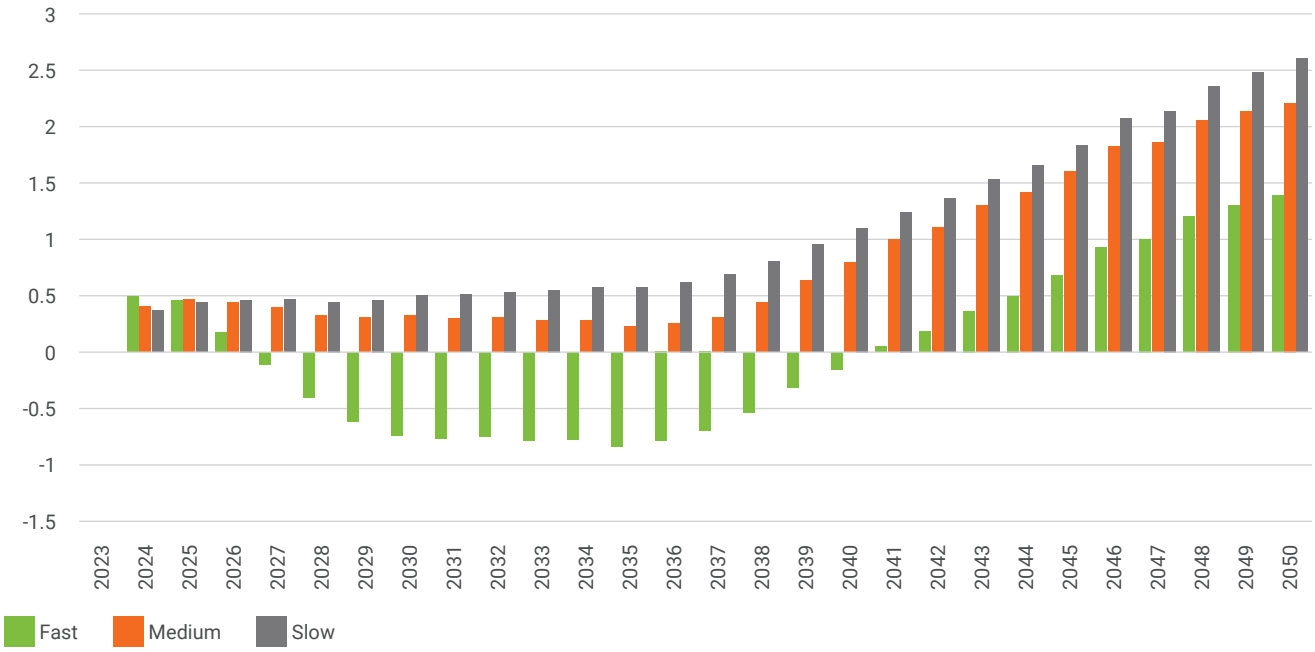


Table 23: Total Costs for All Three Scale-Up Scenarios across Different Time Horizons, in UAH billions, Discounted at 5%

	2023-2030	2031-2040	2041-2050	2023-2050
Fast				
Average Annual Cost (UAH Billions)	70	119	208	112
Total Cost for the Period (UAH Billions)	423	957	1,543	2,924
Medium				
Average Annual Cost (UAH Billions)	69	117	196	112
Total Cost for the Period (UAH Billions)	414	941	1,573	2,928
Slow				
Average Annual Cost (UAH Billions)	68	112	191	109
Total Cost for the Period (UAH Billions)	411	899	1,528	2,838

It is also important to consider the additional costs that will be required to fund the social protection and child protection package. In doing this, costs saved from care reform should be considered. In the fastest scale-up scenario, the costs saved from care reform are so significant that no additional costs are required before 2041. In fact, costs savings are estimated at UAH 1 billion between 2023 and 2030, and UAH 6 billion between 2031 and 2040. In the medium and slow scale-up scenarios, additional costs are required throughout; however, cost savings from care reform make these additional costs more manageable. Between 2023 and 2030, an estimated additional UAH 3 billion is required in the slow scale-up scenario, rising to UAH 19 billion between 2041 and 2050. Figure 39 depicts the additional costs required to scale-up the social protection and child protection package, considering cost savings from reducing institutional care. These cost savings will be discussed in greater detail in the benefits section.

Figure 39: Additional Costs Required to Scale-Up the Social Protection and Child Protection Package, in UAH Billions, Discounted at 5%



It is important to note that these are high-level estimates. More detailed costing and cost-effectiveness exercises of the social protection and child protection programmes are an important next activity. Evidence from cost-effectiveness and efficiency analyses of social protection would provide critical evidence on how to maximise outcomes for children within constrained fiscal contexts. With changes to service delivery, it may be that quality social protection programmes can be provided at lower cost than that assumed in this study. Detailed costings of care reform that include integrated services for alternative care, as well as the monetary benefits, are required for a full CBA.

3.3.3 Benefits

3.3.3.1 Methodology

The social and child protection package analysed the benefits that accrue from scaling up cash transfer programmes, parental leave, parenting support programmes, and deinstitutionalisation. The benefits of parenting support programmes and additional early childhood interventions were analysed through an in-depth literature review as it was not possible to quantify the significant range of benefits that can be garnered from investing in parenting support programmes.

3.3.3.1.1 Cash Transfer Programmes

Four cash transfer programmes were included in the modelling. Scaling up the value of the Universal Baby Grant was modelled, as well as scaling-up the coverage of cash transfers for large families with children under six, families with children under six with disabilities, and families with children under six with no parental support. The study modelled the benefits on children that would occur following the scale-ups. Benefits with sufficient and robust international evidence are necessary, so that these benefits can be applied to a range of cases, such as in Ukraine. Thus, this Investment Case modelled three benefits of scaling up cash transfer programmes: health benefits, education benefits, and economic multiplier effects. The monetary and non-monetary returns from all three benefit pathways together illustrates the benefits gleamed by investing in cash transfer programmes.

Health

The most significant quantifiable long-term impacts of cash transfer programmes are found in the health sector. Cash transfer programmes demonstrate an impact on a range of health and nutrition behaviours. Many studies report an impact on exclusive breastfeeding and handwashing. Average effect sizes were taken for both interventions: 17% for exclusive breastfeeding, and 47% for handwashing.

In turn, these changes lead to reductions in morbidity and mortality, which are expressed as YLLs and YLDs averted. The impact of the respective interventions is captured by these two outcomes. Child lives saved by intervention contribute to YLL, and different diseases have a disability weight, depending on their severity, which decides the disease's contribution to YLD. For example, stunting has a 'disability weight' of 0.002, according to IMHE's Global Burden of Disease.[372] YLD and YLL of each disease are then added together to calculate DALYs.

One advantage of converting diseases into DALYs is that they are directly comparable to one another, quantifiable, and monetisable. Assigning a monetary unit to a DALY accounts for the productivity loss resulting from poor health or death. WHO proposes that one DALY can be assigned a monetary value of 1.55 times GDP, per capita, in any given country, due to the productivity losses that result.[373] This figure is used to calculate the economic value of health interventions within benefit modelling.

Education

Quantitative educational benefits from cash transfer programmes focus on the increased amount of schooling that may result from an intervention. One of the key pathways to increasing schooling is ensuring primary enrolment rates are increased. The effect of cash transfer interventions on primary school enrolment has been studied in a variety of contexts. The most robust source of information on this pathway is from the World Bank, which conducted a meta-analysis of unconditional cash transfers on primary school enrolment, finding an overall effect size of 23%.[374] For our quantitative modelling, an unweighted average effect size of 15% is used, which is an average of the effect sizes found across a literature review.

Increased enrolment in school leads to increased years of education, which in turn leads to an economic rate of return. A recent multi-country analysis of the impact of preschool enrolment on educational attainment found that for every 10 percentage point increase in enrolment, there would be a subsequent 0.14 percentage point increase in the average years of schooling across the population. Increasing educational attainment can have a significant economic return. Studies show that increasing years of schooling are associated with an increase in productivity and lifetime earning potential. Using both the impact of cash transfers on primary school enrolment and the increase in enrolment on educational attainment and economic return, the model can establish the impact on years of education, and therefore the impact on lifetime earnings, which are caused by scaling-up cash transfer programmes.

Economic Multiplier Effect

The economic multiplier effect results from the increased consumption from cash transfer programmes. Assumptions about the size of the effect derive from a paper by Borden et al., in 2023.[375] This paper studies the impact of cash transfer programmes in the region and found an effect size of 1.30. This multiplier is used as the foundation of the poverty reduction benefits in this model.

This is the most effective way to model the poverty reduction benefits of cash transfers. Cash transfers alleviate poverty by supplementing the income of the poorest households, which enables them to increase their consumption of food and other basic items.[376] This increase in consumption has been proven to increase access to essential services, such as health and education, reducing poverty through improved developmental outcomes.

[372] Institute for Health Metrics and Evaluation (2019). Global Burden of Disease. Accessed: May 25th 2024. Available here: https://www.healthdata.org/research-analysis/gbd

[373] WHO Regional Office for Africa (2019). The Indirect Cost of Illness in Africa. Accessed: June 1st 2024. Available here: https://www.afro.who.int/sites/default/files/2019-03/Productivity%20cost%20of%20illness%202019-03-21.pdf

[374] Baird, S. (2014) Conditional, Unconditional and Everything in Between: A Systematic Review of the Effects of Cash Transfer Programs on Schooling Outcomes. https://openknowledge.worldbank.org/server/api/core/bitstreams/c9f76e5b-ac70-50c0-ac1e-aec104bff356/content

[375] Gassmann, F. et al. (2023). Is the Magic Happening? A Systematic Literature Review of the Economic Multiplier of Cash Transfers. https://openknowledge.worldbank.org/server/api/core/bitstreams/b6556138-bfba-4cc4-abf7-723694bb90e5/content

[376] Independent Commission for Aid (2017). The Effects of DFID's Cash Transfer Programs on Poverty and Vulnerability, accessed: 22 December 2023. https://icai.independent.gov.uk/wp-content/uploads/ICAI-Review-The-effects-of-DFID%E2%80%99s-cash-transfer-programmes-on-poverty-and-vulnerability-1.pdf

Box 28: Calculating the Benefits of Cash Transfer Programmes

3.3.3.1.2 Parental Leave

An Excel-based model was developed to estimate the benefits of parental leave (maternity and paternity) policies. Paid parental leave already exists in Ukraine. This model, however, looks at the monetizable benefits and probable costs associated with increasing the duration of this leave. The model here looks to increase maternity leave to 180 days of paid leave (that can be taken entirely after childbirth) in line with global guidance on six months of exclusive breastfeeding. Paternity leave is modelled to increase to two weeks of paid leave, in line with international targets. Three benefit pathways (all based on evidence associated with maternity leave) were measured:

1. **Improved female labour force participation:** The model assumes that increasing the duration of maternity leave would improve women's propensity to participate in the workforce.[377] There is evidence in literature to prove this link but an exact impact estimate is missing; therefore, a small impact estimate is adopted, and the model uses an assumption that the impact of having children on the female labour force participation is reduced by 25%, if parental leave policies were improved.[378] The model then calculates how many additional women would be expected to join the labour force and, therefore, the potential income this might generate.

2. **Averted need for childcare:** The model builds on the assumption that if parents do not have access to paid parental leave, they will need to find alternative care arrangements (or they will need to do this care work unpaid). The benefit of averting this unpaid care work (or the cost of finding alternative care options) is estimated. In line with other studies, the model assumes that the cost of this care work (paid or unpaid) is at 25% GDP, per capita.[379]

3. **Better child development outcomes:** Evidence from global literature suggests that parental leave policies can benefit children significantly, including improving vaccination rates, reducing infant mortality rates, reducing instances of violence, and improving breastfeeding rates.[380] The evidence is strongest on this latter point, and the model pulls on evidence from a meta-review to look at how increasing the duration of maternity leave could improve the rate of early initiation of breastfeeding and exclusive breastfeeding. Impact evidence from literature is then used to estimate the impact of parental leave on breastfeeding and, by extension, on child health and nutrition.[381] Outcomes are expressed in terms of the reduction in stunting, and the reduction in DALYs averted. These are then monetised (following the same methodology as expressed in the Health and Nutrition Benefits section above).

Monetised benefits are then totalled, discounted at a rate of 5%, and reported independently from the benefits of other social protection interventions (i.e., cash transfers).

3.3.3.1.3 Care reform

The benefits of care reform, of which deinstitutionalisation is a key aspect, have been modelled. The model calculates how many fewer children would be institutionalised under the scale-up scenarios (fast, medium, and slow). The benefits of these scenarios are then calculated through three benefit pathways:

[377] UNICEF (2019). Paid Parental Leave and Family-Friendly Policies: An Evidence Brief, (UNICEF: New York, USA).
[378] International Labor Organisation (ILO) and UN Women (2020). The Impact of Marriage and Children on Labor Market Participation. Average for Europe and Northern America, (ILO and UN Women: Geneva, Switzerland).
[379] European Parliament (2010). Costs and Benefits of Maternity and Paternity Leave, (European Parliament: Strasbourg, France).
[380] UNICEF (2019). Paid Parental Leave and Family-Friendly Policies: An Evidence Brief, (UNICEF: New York, USA).
[381] Chai, Y., Nandi, A. and Heymann, J. (2018). Does Extending the Duration of Legislated Paid Maternity Leave Improve Breastfeeding Practices? Evidence from 38 Low-Income and Middle-Income Countries, BMJ Global Health, 3(5).

1. **Improved impact on lifetime earnings:** Institutionalisation has been found to be associated with a reduction in many domains of child development, including cognitive development. Studies globally, including in eastern Europe, find that children who have been institutionalised are likely to have reduced cognitive functioning later in life (with this beginning to show from early adolescence) when measured through IQ.[382] As IQ is associated with lifetime earnings and wages, the model quantifies the impact of preventing institutionalization (and instead having children in alternative care) on IQ and then later earnings.[383]

2. **Improved mental health:** Institutionalization is strongly associated with poorer health outcomes, including physical and mental health. The evidence for mental health is particularly strong: institutionalisation damages children's socio-emotional development, their attachment, and other developmental domains, which can contribute to the incidence of mental or psychiatric disorders.[384] Studies find that children in institutional settings (compared to peers who have been fostered or never institutionalised) have far higher rates of mental disorder.[385] The model calculates the number of psychiatric cases that could be averted due to a reduction in child institutionalisation and then calculates how many potential years of life lost would be averted as a result of this.[386] This is then monetised (as DALYs) using the same approach described in the Health and Nutrition Benefits section above.

3. **Reduced costs:** Caring for children in institutions is expensive. Estimates of the annual unit cost (per child) of caring for a child in an institution in Ukraine is around UAH 4.7 million.[387] This unit cost estimate was adjusted for inflation and multiplied by the number of children who would no longer be in institutions for each year of the study time horizon.

The total benefits were calculated by adding the monetised benefits of the three benefit pathways above. Benefits were discounted at a rate of 5%.

3.3.3.2 Findings: Benefits of Cash Transfers

International literature is clear on the benefits of cash transfer programmes. Cash transfer programmes are linked to a range of both monetary and non-monetary benefits. The programs have a positive impact on household consumption by alleviating financial pressures. Besides an overall increase in consumption, child grants help reduce malnutrition and the associated physical effects, such as stunting or obesity among children.[388] Cash transfers are also associated with increased school attendance, particularly among girls.[389] Moreover, alleviating poverty has a significant range of poverty impacts. Poverty is associated with toxic stress, which increases the risks of poor physical and cognitive health later in life. These life-long effects can be mitigated by the financial support provided by cash transfers. Evidence also suggests that alleviating poverty in the home reduces the stressors associated with having a low income, improving the quality of life of both children and caregivers.[391] These benefits can extend to improving the mental health of children, largely because of a reduction in family strife associated with poverty and financial stress.[392] Overall, the benefits of cash transfer programmes are comprehensive.

[382] Almas, A., Nelson, C., Degnan, K., and Zeanah, c. (2016). IQ at Age 12 Following a History of Institutional Care: Findings from the Bucharest Early Intervention Project, Developmental Psychology.
[383] Grosse, S. and Zhou, Y. (2021). Monetary Valuation of Children's Cognitive Outcomes in Economic Evaluations from a Societal Perspective: A Review, Children (Basel), 8(5): 352.
[384] Wade, M., Parsons, J., Humphreys, K. et al. (2022). The Bucharest Early Intervention Project: Adolescent Mental Health and Adaptation Following Early Deprivation, Child Development Perspectives, 16, 157-164.
[385] Ibid.
[386] Nam Chan, J., Correll, C., Man Wong, C. et al. (2023). Life Expectancy and Years of Potential Life Lost in People with Mental Disorders: A Systematic Review and Meta-Analysis, eClinical Medicine (The Lancet: Discovery Science), 65, 102294.
[387] Nam Chan, J., Correll, C., Man Wong, C. et al. (2023). Life Expectancy and Years of Potential Life Lost in People with Mental Disorders: A Systematic Review and Meta-Analysis, eClinical Medicine (The Lancet: Discovery Science), 65, 102294.
[388] a varied diet, and see improvements in anthropometric measures of their children. However, an important caveat to these results was the importance of complementary interventions, such as providing nutritional supplement or behavioural change training, which when provided together with cash transfers, created more consistent nutritional improvements among children
[389] Bastagli, F. et al. (2016). Cash Transfers.
[390] Francis, L., DePriest, K., Wilson, M. and Gross, D. (2018). Child Poverty, Toxic Stress, and Social Determinants of Health: Screening and Care Coordination, Online Journal of Issues in Nursing, 23(3):2.
[391] Maxfield, A., and Thomson, D. (2023). Cash Transfers Support Infant and Toddler Development, accessed: 27 February 2024. https://www.childtrends.org/publications/cash-transfers-support-infant-and-toddler-development
[392] Zimmerman, A. et al. (n.d.). The Impact of Cash Transfers on Mental Health in Children and Young People in Low-Income and Middle-Income Countries: A Systematic Review, BMJ Journals, accessed: 27 February 2024. https://gh.bmj.com/content/6/4/e004661.info

Cash transfer programmes can help Ukrainian families meet their basic needs. In 2017, the World Food Programme (WFP) found that 53% of households in Donetsk and Luhansk relied on social benefits as their primary source of income to purchase food and other essential items, such as school materials.[393] The Universal Birth Grant has had a considerable poverty reduction effect on beneficiaries. As a result of the transfers, poverty was reduced by 7.6% between 2016 and 2017.[394] Additional humanitarian cash transfers have been launched since the start of the full-scale war in 2022. The WFP is working closely with MoSP to streamline social services through their cash transfer programme.[395] Using an app, citizens gain access to a range of social assistance services, which previously would have required visiting different State authorities.[396] Alongside the WFP, UNICEF's cash transfer programmes are aimed at vulnerable households with children, currently reaching 320,000 families across Ukraine.[397] These 'multipurpose' transfers are aimed at meeting a variety of basic needs, particularly for households living in areas badly impacted by the war.[398] These humanitarian cash transfers are enabling households to buy food and medicine for their children, and they are also linking families with additional services, such as providing them with access to formal and nonformal education.[399] Indeed, UNICEF's cash transfer was found to have helped families meet their basic needs, with 83% of beneficiaries using part of the money to purchase food, 79% for clothing, and 61% for educational materials.[400]

3.3.3.2.1 Improvements in Health and Nutrition Outcomes

Cash transfers have been associated with improvements across child health outcomes.[401] However, comprehensive numerical evidence linking cash transfers to health outcomes has only been narrowly defined. The impact of cash transfers on one outcome modelled was a reduction in child deaths. The table below details this and other health outcomes under two scale-up scenarios.

Table 24 shows the additional child deaths, YLLs, YLDs, and DALYs (average and in total) for all three scale-up scenarios across different time horizons. Under the fast scenario, an average of 9.5 child deaths could be averted in Ukraine each year. Between 2023 and 2030, 42 child deaths could be averted. In total, 247 child lives could be saved, resulting in 31,023 DALYs. In the slow scenario, 9 child lives could be saved between 2023 and 2030, and 127 lives could be saved across the time horizon. This translates to 15,951 DALYs averted. Many of these health impacts can be observed within the first ten years following the scale-up of cash transfer programs. Therefore, although health impacts tend to be thought of as longer-term interventions, the pay-off to implementing this scale-up is relatively high in the short-run, and therefore yields very tangible results almost immediately.

[393] Harvey, P. et al. (2022). Ukraine – Can Social Protection be Sustained and Support a Humanitarian Response?, accessed: 02 April 2024. https://wlv.openrepository.com/bitstream/handle/2436/624650/Ukraine-SocialProtectionBriefing2022.pdf?sequence=2

[394] UNICEF (2020). Universal Child Benefit Case Studies: The Experience of Ukraine, accessed: 02 April 2024. https://www.unicef.org/media/70481/file/UKR-case-study-2020.pdf

[395] The World Food Program (2022). Cash Assistance and Social Benefits in Ukraine, accessed: 02 April 2024. https://docs.wfp.org/api/documents/WFP-0000156961/download/?_ga=2.211500306.607753.1712049292-410295548.1709014342

[396] Ibid.

[397] UNICEF (2023). Supporting the Basic Needs of Children and Families in Conflict-Affected Areas with Humanitarian Cash Transfers, accessed: 29 April 2024. https://www.unicef.org/ukraine/en/media/43101/file/PDM%20HCT%20Q4%202023_BRIEF_ENG.pdf.pdf

[398] Ibid.

[399] Ferguson, S. (2022). Humanitarian Cash Transfers Provide Vital Aid for Ukraine's Families, accessed: 02 April 2024. https://www.forbes.com/sites/unicefusa/2022/08/30/humanitarian-cash-transfers-provide-vital-aid-for-ukraines-families/

[400] UNICEF (2023). Supporting the Basic Needs of Children and Families in Conflict-Affected Areas with Humanitarian Cash Transfers, accessed: 29 April 2024. https://www.unicef.org/ukraine/en/media/43101/file/PDM%20HCT%20Q4%202023_BRIEF_ENG.pdf.pdf

[401] Bastagli, F. et al. (2016). Cash Transfers.

Table 24: Additional Child Deaths, YLLs, YLDs, DALYs for all three Scale-up Scenarios for different time horizons

	2023-2030	2031-2040	2041-2050	2023-2050
Fast				
Child Deaths Averted	42	107	98	247
Years of Life Lost Averted	2638	6720	6154	15,511
Years Lived with Disability Averted	2638	6720	6154	15,511
DALYs Averted	5275	13,439	12,309	31,023
Medium				
Child Deaths Averted	17	80	98	195
Years of Life Lost Averted	1,068	5,024	6,154	12,246
Years Lived with Disability Averted	1,068	5,024	6,154	12,246
DALYs Averted	2,135	10,048	12,309	24,492
Slow				
Child Deaths Averted	9	53	72	127
Years of Life Lost Averted	565	3,328	4,082	7,976
Years Lived with Disability Averted	565	3,328	4,082	7,976
DALYs Averted	1,130	6,657	8,164	15,951

3.3.3.2.2 Improvements in Education

Globally, there is noteworthy evidence that cash transfers increase school attendance.[402] This evidence is particularly strong for low- and middle-income countries. Research from Columbia suggests that cash transfers had a significant impact on children's verified attendance in school.[403] However, the evidence is less clear on whether learning outcomes are improved for children in households that receive a cash transfer. Thus, to determine whether scaling up social protection can make a meaningful impact on a child's learning outcomes, additional years of schooling and potential lifetime earnings were modelled.

Studies show that increased years of schooling are associated with an increase in productivity and lifetime earning potential.[404] Under the fast scenario (Table 25), the total additional number of years of schooling could range from 82,393 in the short term (up to 2023) to 516,437 by the end of the study period. The number would be lower under the slow scenario, ranging from 21,361 (up to 2030) to 305,622 at the end of the period.

Table 25. Total Additional Years of Schooling under All Three Scenarios across Different Time Horizons

	2023-2030	2031-2040	2041-2050	2023-2050
Fast				
Additional Years of Schooling	82,393	230,005	223,847	516,437
Medium				
Additional Years of Schooling	33,926	163,825	223,847	413,443
Slow				
Additional Years of Schooling	21,361	103,149	186,246	305,622

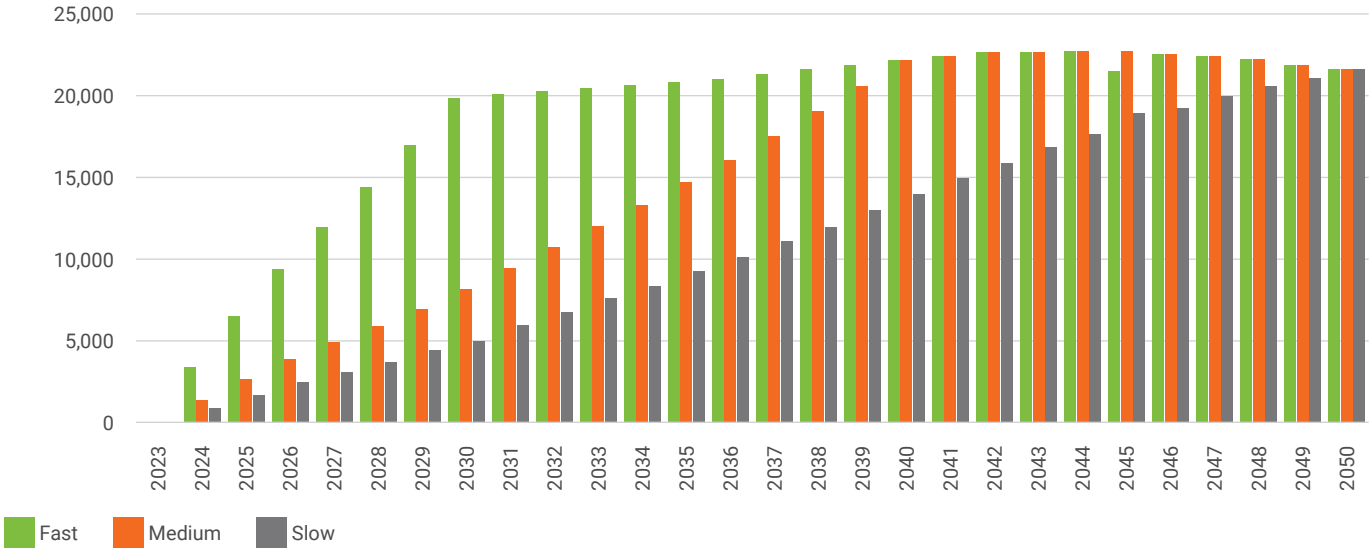
The number of additional school years gained from investing in cash transfers increases significantly overtime. The graph below illustrates the number of school years that will be gained annually across the three scale-up scenarios.

[402] Ibid.

[403] Barca, V. et al. (2016). Cash Transfers: What Does the Evidence Say? A Rigorous Review of Program Impact and of the Role of Design and Implementation Features, accessed: 02 April 2024. https://thedocs.worldbank.org/en/doc/111531529868058319-0160022017/original/Day39am10749.pdf

[404] To avoid double counting, only the additional years of schooling has been monetised. To additionally monetise the economic value of LAYs would involve counting the benefits of improving schooling and educational attainment twice, which would distort the subsequent cost-benefit analysis. The decision that additional years of schooling would be chosen for monetisation the most common practice in the literature. LAYs remain a new metric and, therefore, studies associating them with economic impact remain nascent.

Figure 40. The Number of Additional School Years Gained Annually Across Three Scenarios



3.3.3.2.3 Monetary Benefits of Cash Transfers

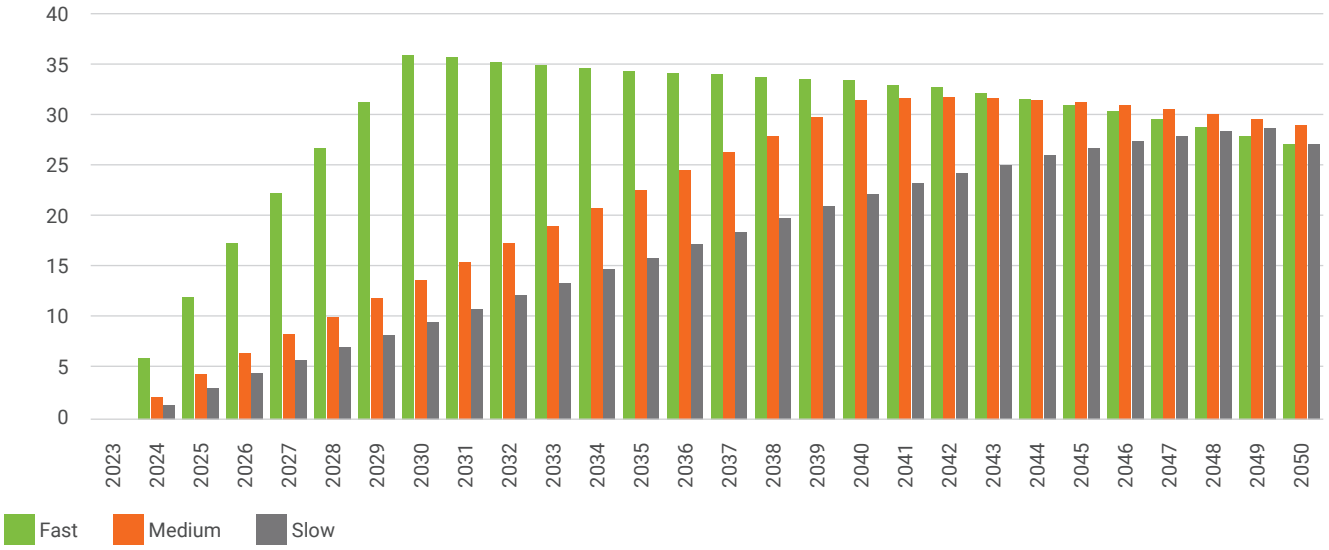
When monetised, the benefits of cash transfers are impressive, particularly under the fastest scenario (Table 26). DALYs are monetised by taking the productivity of an individual accrued due to averted DALYs, in current GDP per capita in UAH. This accounting illustrates the increase in economic productivity because of DALYs averted. Similarly, improved childhood health and education outcomes lead to increased productivity over time, resulting in higher overall lifetime earnings. Through both mechanisms, the Ukrainian government would be able to obtain a fiscal benefit – directly, through greater revenues from income tax due to higher earnings among the population, and indirectly, through taxes such as the Value Added Tax (VAT) – as individuals increase consumption as a result of greater incomes. Under the fast scenario, the monetisation of these benefits is well over a UAH 1 trillion, with DALYs averted providing over UAH 14 billion in economic benefits. In total, Ukraine stands to gain over UAAH 338 million in increased productivity and tax revenues because of scaling up social protection through cash transfers.

Table 26: Monetisation of Benefits for All Three Scale-Up Scenarios for 2023-2050, in UAH Billions, Discounted at 5%

	2023-2030	2031-2040	2041-2050	2023-2050
Fast				
Additional Lifetime Earnings	68	118	76	262
Additional GDP from DALYs	1.2	2.9	2.3	6.4
Additional Income Generated from the Economic Multiplier	82	222	227	531
Total Monetary Benefits	152	343	305	800
Medium				
Additional Lifetime Earnings	25	75	76	176
Additional GDP from DALYs	0.5	0.2	0.2	0.9
Additional Income Generated from the Economic Multiplier	32	159	230	421
Total Monetary Benefits	58	234	306	598
Slow				
Additional Lifetime Earnings	17	53	62	132
Additional GDP from DALYs	0.3	1.5	1.6	3.4
Additional Income Generated from the Economic Multiplier	23	112	202	337
Total Monetary Benefits	41	167	265	473

Total monetary benefits gained from the scale-up are the highest for the fastest scale-up scenario (Figure 41). This is because more children are covered earlier by the scale-up of the cash transfers, leaving them longer to reap the economic benefits. Ukraine stands to generate more than **UAH 800 billion** from the fast scale-up scenario, and nearly **UAH 600 billion** from the medium. Investing rapidly in social protection programmes will not only provide comprehensive protection for families, but it will also help Ukraine's economic recovery, which is especially important in the context of the war. Investing in a comprehensive social protection system will help Ukraine develop a prosperous society, one that helps its citizens thrive and encourages people to return.

Figure 41. Total Monetary Gains from Scaling-Up Cash Transfers, in UAH Billions, Discounted at 5%



3.3.3.3 Findings: Benefits of Parental Leave

The benefits of parental leave are comprehensive for both caregivers and children. Increasing parental leave allowances is associated with improvements in physical and mental health for caregivers.[405] Moreover, adequate leave policies provide caregivers time to care for and bond with their infant, establish routines for feeding and care, and attend to their baby's medical needs.[406] Moreover, increasing the duration of parental leave has been found to improve nutritional outcomes for infants, largely because it is associated with increased rates of breastfeeding.[407] A global study of over 185 countries found that paid parental leave was associated with improved immunization rates.[408] Yet, the benefits of parental leave extend beyond improvements to health. Research from Australia found that access to maternity leave was linked to a reduction in intimate partner violence, a crime that is detrimental to the health of both mothers and children.[409] In recent years, increased attention has been put on the benefits of paternity leave specifically. Evidence suggests that fathers who have access to adequate paternity leave are more likely to be involved in childcare, leading to long-term socioemotional benefits for children.[410]

Increased parental leave is also associated with increased fertility. This outcome is particularly important in Ukraine, due to the demographic decline the country is experiencing. Research from Austria noted that an increase in the duration of parental leave increased fertility by 15%.[411] Meanwhile, in Germany, increasing the payments allocated to women on maternity leave increased fertility by 1.2%.[412] In Estonia, an increase in earning-related parental leave was associated with

[405] Coombs, S. (2021). Paid Leave is Essential for Healthy Moms and Babies, accessed: 27 February 2024. https://nationalpartnership.org/report/paid-leave-is-essential-for/
[406] UNICEF (2019). Paid Parental Leave and Family-Friendly Policies: An Evidence Brief, accessed: 27 February 2024. https://www.unicef.org/media/95086/file/UNICEF-Parental-Leave-Family-Friendly-Policies-2019.pdf
[407] Ibid.
[408] Ibid.
[409] Ibid.
[410] Ibid.
[411] Bassford, M., and Fisher, H. (2020). The Impact of Paid Parental Leave on Fertility Intentions, Economic Record, 96: 402-430, accessed: 30 April 2024. https://ses.library.usyd.edu.au/bitstream/handle/2123/26227/Fisher_2020_ER_accepted_final.pdf?sequence=1&isAllowed=y
[412] Ibid.

a substantial increase in second and third births.[413] As such, increasing parental leave allowances in Ukraine is likely to encourage an increase in birth rates, supporting Ukraine in its period of demographic decline. It is paramount that Ukraine scales up parental leave allowances to be in line with international standards so that these benefits can be fully realised.

Thia study has modelled increasing paid maternity and paternity leave, paid at 100% to support pregnancy and the birth of a child. The study modelled increasing maternity leave to 180 days, from 126 days. It also advocates for flexibility around when these days can be taken. Currently, 70 days of maternity leave must be taken before a child is born. Also modelled was increasing paternity leave to two weeks fully paid at 100%.

The Investment Case examined the increase in female labour market participation and the health impacts associated with improved rates of breastfeeding.

3.3.3.3.1 Increasing Female Labour Force Participation

The Investment Case found that improving maternity leave leads to an increase in female labour force participation. These improvements occur largely due to women's jobs being more closely protected, and the impact maternity leave has on creating a more enabling environment for women in the workplace. Childbearing has a significant impact on female labour market participation. Women who live in households with a child under six are 12% less likely to participate in the labour force than the female average.[414] The study analysed the increase in the number of women who would enter the labour market because of an increase in parental leave allowances.

Under the scale-up scenarios, the number of additional women entering the labour market increases. The Investment Case found that between 2023 and 2050, almost 500,000 additional women could join the labour force, partially as a result of increasing parental leave allowances. If this occurs alongside investment into ECEC, the number of women returning to work would be likely to increase.

Table 27: Total Number of Additional Women Entering the Labour Market in the Short Term, under All Scale-Up Scenarios, over the Entire Period

	2023-2030	2031-2040	2041-2050	2023-2050
Scale-up Scenario				
Total Number of Additional Women Entering the Labour Market	112,998	190,733	187,348	491,079

3.3.3.3.2 Increasing Breastfeeding Rates

Extending the duration of paid parental leave is linked to increased rates of breastfeeding. Specifically, increasing the duration of paid maternity leave is associated with a 7.8% increase in the early initiation of breastfeeding and a 5.9% increase in the prevalence of exclusive breastfeeding.[415] In turn, an increase in breastfeeding is shown to have a positive impact on a range of childhood illnesses, thus leading to a reduction in child deaths, the number of stunted children, and cases of childhood illnesses. The study modelled three types of impact change. Impact Change A is the assumption used for the final calculation of benefits. This impact assumes that the existing policy of having to take 70 days of maternity leave before birth and 56 days afterwards remains the same. Impact Change B assumes that mothers take most of their leave after giving birth, and just 14 days beforehand. It therefore assumes that breastfeeding will increase because maternity leave taken after birth has increased. Impact Change C assumes just a one-month effect size on breastfeeding. This is regardless of when maternity is taken, the impact change assumes that women will breastfeed for an additional month. The table below illustrates the impact that increasing the duration of parental leave has, through increased rates of breastfeeding, on the number of child deaths and number of stunted children.

[413] Abdullayay, A, et al. (2023). Parental Leave and Fertility: Individual-Level Responses in the Tempo and Quantum of Second and Third Births, European Journal of Population, 39, accessed: 30 April 2024. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10322813/
[414] UNICEF (2019). Paid Parental Leave and Family-Friendly Polices: An Evidence Review, accessed: 27 February 2024.
[415] Chai, Heymann and Nandi (2018).

Table 28. The Number of Child Deaths and Stunting Cases Averted Due to an Increase in Rates of Breastfeeding Following a Scale-Up of Parental Leave

	2023-2030	2031-2040	2041-2050	2023-2050
Impact Change A				
Child Deaths	54	83	213	350
Stunting Cases Averted	1,215	2,345	5,784	9,344
Impact Change B				
Child Deaths	110	277	430	817
Stunting Cases Averted	2,425	7,099	11,530	21,054
Impact Change C				
Child Deaths	30	75	117	222
Stunting Cases Averted	664	1,949	3,168	5,781

3.3.3.3.3 Monetary Benefits

The total monetary benefits gained from increasing the duration of parental leave occur through three different benefit pathways. Firstly, monetary gains are accrued from an increase in labour market participation (as women do not have to leave their jobs to care for children) and secondly from the costs saved from childcare (when parental leave is extended, caregivers do not have to pay for their children to go into childcare). Finally, it is also possible to monetise the health benefits, using the same methodology as in the Health and Nutrition section. The number of child deaths and stunting cases averted are converted into DALYs, which can be converted into a productive contribution to society. The total monetary gains accrued from scaling up the duration of parental leave can be found in the table below.

Table 29. The Total Monetary Benefits Accrued from the Fast Scale-Up of Parental Leave over Different Time Horizons, in UAH billions, Discounted at 5%

	2023-2030	2031-2040	2041-2050	2023-2050
Fast Scale-Up Scenario				
Increase In Labour Force Participation	1.6	2.8	2.8	7.2
Costs Saved from Childcare	0.9	1.6	1.5	4.1
Increase in Breastfeeding (Impact Change A)	1.2	1.6	0.9	3.8
Total Monetary Impact	3.8	6.1	5.2	15.1

3.3.3.4 Benefits of Early Childhood Interventions

Early childhood interventions are services designed to identify and provide effective support to children who are at risk of poor outcomes.[416] These services can take many forms and include things such as parenting support programmes, child therapy, assistance for children with developmental delays, and home visiting programmes. Early childhood interventions complement other services, such as cash transfer programmes and care policies, to ensure children can remain in family-based settings, be safe, grow, and thrive. Institutionalisation could also be considered an early childhood intervention; however, its negative impacts are well-documented. As such, this Investment Case modelled the benefits of reducing institutional care as part of a greater care reform package.

The benefits of scaling-up early childhood interventions and reducing institutional care are detailed below. There is a focus on parenting programmes; other early childhood interventions, such as mental health support and the home visiting programme, are explored in more detail in other sections of the Investment Case. As previously stated, it was not possible to quantifiably model parenting programmes, but a comprehensive write-up of the benefits can be found below. However, the benefits of reducing institutional care have been modelled, and this economic evaluation can be found in this section.

Continued investment in a range of early childhood interventions is imperative as Ukraine focuses on its recovery from the war. This support, along with cash transfers and care policies, can ensure that children remain in safe, stable family environments.

[416] Early Intervention Foundation (n.d.). What is Early Intervention? Accessed: 08 April 2024. https://www.eif.org.uk/why-it-matters/what-is-early-intervention

Ukraine has invested in many early childhood interventions. Most notable are Ukraine's parenting support programmes led by the Better Care Programme, and the Home Visiting Programmes, both discussed in significant detail in this report. However, additional early childhood interventions are also available across the country, with a growing focus on children and parents being able to manage the trauma of war. Organizations, such as the International Step by Step Association, have been providing support for children living in emergency settings. The assistance includes psychosocial support for children, and materials for parents, caregivers, and ECEC staff.[417] Their interventions include 'Let's Play', a card-based activity game designed to help children work through trauma.[418] Working with both children and caregivers is paramount for a child's long-term development. The mental health of caregivers can have a significant impact on a child's intellectual, emotional, social, and psychological development; and so early childhood interventions can have a positive impact on all family members.[419]

Support for children with disabilities is an important part of early childhood interventions. One such intervention in Kharkiv is providing help and guidance to children with developmental delays and their caregivers.[420] The service offers care from birth to four years of age, focusing on developing vital skills in children and improving their interaction.[421] Alongside this, specialists help the parents and caregivers of these children. They are taught the best ways to support their children, while ensuring the caregivers feel confident in their abilities.[422] Parents who have used the programme have noted the significant range of benefits that help their children to learn to interact with more people, thus supporting their developmental process. This is particularly important given the ongoing war in Ukraine which has impacted many ECEC centres, reducing children's interaction with their peers.

Box 29. Evidence from Early Childhood Intervention in Kharkiv

> The specialists are always here. They are always in touch. The parents understand what is going on with their children, so they do not despair or search for information on the internet.
>
> *Speech Therapist, Kharkiv*

3.3.3.4.1 Parenting Support Programmes

Parenting support programmes are structured initiatives designed to guide and support caregivers in their fundamental roles. These programmes are making significant strides in promoting the development and well-being of children worldwide. This section examines the significant global evidence on the benefits of parenting support programmes, particularly for children under the age of six. It analyses the situation in Ukraine, examining the parenting support programmes that are currently being implemented, the benefits of these programmes, and ways in which they can be expanded to reach more children. Parenting support programmes are particularly important in the context of the war and the challenges this brings for both parents and children.

Parenting support programmes offer a comprehensive and powerful tool for transforming lives. They help foster early childhood development and the resilience children need to cope with adverse circumstances. Quality parenting is essential for fostering resilience in children, which can be considered as the ability to produce a positive or adaptive response in the face of significant adversity.[423] The ability to respond to various challenges throughout life is often rooted in the quality of relationships that children have with their parents or primary caregivers. However, the individual resilience of caregivers must be coupled with systematic resilience within a community to ensure children are given the best start possible.[424] Communities and countries must also provide resources and support able to strengthen the capabilities of families.[425]

[417] International Step by Step Association (n.d.). Support for Children of Ukraine, accessed: 08 April 2024. https://www.issa.nl/Support_for_Ukraine
[418] Ibid.
[419] NSPCC (2024). Parental Mental Health Problems, accessed: 08 April 2024. https://learning.nspcc.org.uk/children-and-families-at-risk/parental-mental-health-problems#:~:text=If%20parents%20experience%20mental%20health,2017%3B%20Hogg%2C%202013).
[420] UNICEF (2023). Child Therapy Service Helps Transform Lives in Ukraine, accessed: 08 April 2024. https://www.unicef.org/ukraine/en/stories/child-therapy-service-helps-transform-lives
[421] Ibid.
[422] Ibid.
[423] National Scientific Council on the Developing Children (2015). Supportive Relationships and Active Skill-Building Strengthen the Foundations of Resilience: Working Paper 13, accessed: 02 April 2024. https://harvardcenter.wpenginepowered.com/wp-content/uploads/2015/05/The-Science-of-Resilience2.pdf
[424] Ibid.
[425] Ibid.

Parenting support programmes are evidence-based interventions aimed at equipping parents and caregivers with the skills and knowledge needed to promote their children's holistic development. These programs encompass a broad spectrum of content and methods, targeting various aspects of child development and parental influence. They aim at improving how parents approach and execute their role as parents, specifically related to their parenting knowledge, attitudes, skills, behaviours, and practices.[426] The design features of parenting support programmes vary significantly between different contexts as the needs of local communities are very important when considering introducing a programme.

The objectives of parenting support programmes can differ considerably. Some programmes aim to enhance parenting skills, focusing on aspects like positive discipline, stress management, effective communication, and nurturing relationships.[427] For example, in Europe and Central Asia, UNICEF has launched a mobile parenting application called Bebbo which supports caregivers of children under 6 by providing them with evidence-based advice and interactive tools to promote child development and well-being.[428] Other programmes may zero in on the specific developmental needs of children. Many parenting support programmes focus on promoting health and nutrition, such as the NutriCash programme in Uganda led by Save the Children.[429]

The design of these programmes can also differ significantly in length and delivery. While some may be short-term interventions delivered over a few weeks, others may span over a year or, in the case of peer groups, even longer. Delivery modes range from one-on-one sessions, group workshops, and home visits to digital platforms, underscoring the versatility of these initiatives.

Parenting support programmes can be instrumental in enhancing ECD outcomes. These programmes instil essential skills in children and enrich the home environment, promoting aspects like language development, cognitive functioning, and school readiness.[430] In 2021, it was found that parenting support programmes can improve ECD outcomes in low-, middle-, and high-income countries. A meta-analysis found that 46 different studies reported a positive association between parenting support programmes and language development. Thirty-five studies reported a positive association between parenting support programmes and children's motor development, further demonstrating the impact on ECD.[431] In Turkey, a positive parenting programme made significant impacts on psychosocial simulation by combining a summer preschool programme with a parenting education programme for mothers.[432]

Parenting support programmes also place significant emphasis on empowering parents and fostering gender equality, providing the caregivers with the necessary resources, knowledge, and skills to support child development and manage challenging behaviours and gender stereotypes. Parenting support programmes can improve caregivers' sense of self-efficacy and competency, as well as parental satisfaction. Considerable evidence suggests that parent programmes can improve the self-esteem of caregivers and their attitudes towards parenting.[433] In Norway, the national 'Incredible Years' programme found that parents in the programme felt more empowered, less stressed, and better equipped to manage their child's behaviour.[434]

The impact of parenting support programmes extends to the realm of physical health. There is particularly strong evidence linking parenting support programmes to nutrition outcomes, achieved through education and long-term changes to nutritional habits.[435] In the UK, the 'Positive Parenting Programme' led to higher immunization rates, appropriate feeding habits and overall improved health.[436] Parenting support programmes have also been linked to improved rates

[426] UNICEF (2020). Designing Parenting Support Programs for Violence Prevention: A Guidance Notes, accessed: 21 February 2024. https://www.unicef.org/media/77866/file/Parenting-Guidance-Note.pdf

[427] Ibid.

[428] UNICEF (n.d.). ECEC Spotlight Series: Build to Last: Parenting - Engaging Parents and Caregivers to Support Child Development and Early Learning, accessed: 21 February 2024. https://www.unicef.org/media/143676/file/Build%20to%20Last%20.pdf

[429] Ibid.

[430] Jeong, J. et al. (2021). Parenting Interventions to Promote Early Child Development in the First Three Years of Life: A Global Systematic Review and Meta-Analysis, PLoS Med, 18(5), accessed: 21 February 2024. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8109838/

[431] Ibid.

[432] Britto, P. et al. (2015). A Systematic Review of Parenting support programs for Young Children, accessed: 21 February 2024. https://www.unicef.org/sites/default/files/press-releases/media-P_Shanker_final__Systematic_Review_of_Parenting_ECD_Dec_15_copy.pdf

[433] The Wilder Foundation (2016). The Benefits of Parenting Education, accessed: 21 February 2024. https://www.wilder.org/sites/default/files/imports/LitReviewSummary_10-16.pdf

[434] World Health Organization (2018). Empowering Parents by Teaching Positive Parenting Techniques - Norway, accessed: 21 February 2024. https://www.who.int/europe/news-room/feature-stories/item/empowering-parents-by-teaching-positive-parenting-techniques-norway

[435] Britto, P. et al. (2015). A Systematic Review of Parenting support programs for Young Children, accessed: 21 February 2024. https://www.unicef.org/sites/default/files/press-releases/media-P_Shanker_final__Systematic_Review_of_Parenting_ECD_Dec_15_copy.pdf

[436] Goldbatt, P. et al. (2014). Systematic Review of Parenting Interventions in European Countries Aiming to Reduce Social Inequalities in Children's Health and Development, BMC Public Health, accessed: 21 February 2024. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4203958/

of exclusive breastfeeding, hygiene promotion, and a diverse diet for young children.[437] Caregivers have also noted an increased understanding about health and nutrition outcomes, how to ensure children are healthy, and also why this is so important.[438] These significant health and nutrition benefits have been noted around the world, indicating a very strong evidence base.

Parenting support programmes have shown impressive results in mitigating mental health issues among both children and parents. These programmes play a pivotal role in decreasing instances of parental depression and anxiety, as well as behavioural problems among children. The strongest evidence is around the impact of parenting support programmes on the mental health of caregivers and parents. Research from southeast Europe indicates a strong correlation between parenting support programmes and improved mental health amongst caregivers.[439] Alongside improving caregiver mental health, parenting support programmes have been shown to reduce violence against children and improve positive parenting outcomes, in part because of improved mental health outcomes among caregivers.[440] Parenting support programmes can also positively impact children's mental health. Two programmes in Jamaica resulted in greater interpersonal skills, improved self-esteem, and reduced anxiety and depression.[441]

Socio-emotional development forms a critical facet of child development, and numerous parenting support programmes focus squarely on this area. These programmes foster skills such as empathy, self-regulation, and resilience in children, thereby nurturing healthy relationships and positive social interactions.[442] Often these developments are supported by improvements in positive parenting, which in turn fosters a wide range of skills among children.[443] Evidence also suggests that parenting support programmes can provide invaluable support during situations of war and forced displacement. Parenting support programmes can provide the additional assistance that caregivers need to support their children through the war.[444]

Benefits can be expanded if parenting programmes are integrated with a wider range of ECD interventions. By reinforcing health messages and promoting educational activities at home, such programmes are instrumental in bolstering the impact of other services. In Bhutan, UNICEF's Caring for the Caregiver package is delivered in conjunction with the National Education Programme, and it was found that education levels among parents and caregivers were improved.[445] Brazil's 'Criança Feliz' programme is another success case. This programme integrates parenting support with existing health and social protection services, providing home visits to pregnant women and to children under the age of four.[446] Evaluations of the programme have shown improved cognitive and language development in children, in addition to enhanced mother-child interactions.

Parenting Support Programmes in Ukraine

Despite the war, Ukraine is advancing parenting support initiatives to bolster resilience among families. In 2022, UNICEF launched the Bebbo mobile app, which contains the materials and tools needed to help parents monitor the health and development of children from birth to six years; the app currently supports over 100,000 children.[447] Another programme is the Ukraine Parenting Response Project. It collaborates with parents, educators, social workers, medical professionals,

[437] Ibid.
[438] UNICEF (2021). Sweden and Uganda Partner to Improve Nutrition in the West Nile, accessed: 21 February 2024. https://www.unicef.org/uganda/press-releases/sweden-and-uganda-partner-improve-nutrition-west-nile
[439] Jansen, E., et al. (2021). Preventing Child Mental Health Problems in South East Europe: Feasibility Study, accessed: 21 February 2024. https://onlinelibrary.wiley.com/doi/abs/10.1111/famp.12720
[440] Save the Children (2019). Mid-Term Review of the Project 'Child Sensitive Social Protection in Somaliland', accessed: 21 February 2024.
[441] Britto, P. et al. (2015). A Systematic Review of Parenting Support Programs for Young Children, accessed: 21 February 2024. https://www.unicef.org/sites/default/files/press-releases/media-P_Shanker_final__Systematic_Review_of_Parenting_ECD_Dec_15_copy.pdf
[442] The Wilder Foundation (n.d). The Benefits of Parenting Education, accessed: 28 February 2024. https://www.wilder.org/sites/default/files/imports/LitReviewSummary_10-16.pdf; Britto, P. et al. (2015). A Systematic Review of Parenting Programs for Young Children in Low and Middle-Income Countries, accessed: 28 February 2024. https://www.unicef.org/sites/default/files/press-releases/media-P_Shanker_final__Systematic_Review_of_Parenting_ECD_Dec_15_copy.pdf
[443] Ibid.
[444] Please see the case study on Bosnia in section 3.1.4.
[445] UNICEF (n.d.). Build to Last: Parenting – Engaging Parents and Caregivers to Support Child Development and Early Learning, accessed: 28 February 2024. https://www.unicef.org/media/143676/file/Build%20to%20Last%20.pdf
[446] Scielo Brazil (n.d.). Evaluation of the Happy Child Program: A Randomized Study in 30 Brazilian Municipalities, accessed: 21 February 2024. https://www.scielo.br/j/csc/a/h7WtvjjnNzxbDssY6hQ4j6C/?lang=en#:~:text=The%20Happy%20Child%20Program%20(Programa,randomized%20study%20in%2030%20municipalities
[447] UNICEF (2022). UNICEF Launches the Bebbo Mobile App to Help Parents Care for Children during the War, accessed: 21 February 2024. https://www.unicef.org/ukraine/en/press-releases/unicef-launches-bebbo-mobile-app-help-parents-care-children-during-war#:~:text=The%20app%20also%20makes%20it,GooglePlay%20and%20the%20App%20Store

and other key stakeholders to promote positive parenting skills, with a particular focus on improving the mental health of children in Ukraine.[448] Then there is the UNICEF-supported 'Super Dad' campaign, which seeks to engage fathers more actively in their children's early development.[449] The initiative emphasises the importance of fathers' roles in the early years, promoting activities like play, reading, and caregiving.[450]

A significant part of the Better Care programme is the inclusion of positive parenting through parenting support programmes tailored specifically to the context of the war. As part of the Early Childhood Development Action Plan (2021-2023), the Ukrainian government, in collaboration with partners like UNICEF, aimed to scale up parenting support programmes. This includes developing a national parenting support programme, implementing initiatives targeting the most vulnerable families, and integrating parenting support programmes into the broader early childhood development framework.

Parenting support programmes have become more important in the face of the war. Utilising existing parenting support programmes to provide support and advice on navigating the war have been invaluable for caregivers. Parenting support programmes have been shown to provide caregivers with the relevant tools to support children through the trauma of war, as well as to protect their own mental health.[451] For example, UNICEF has supported the development of Splino Spots, an integrated humanitarian support programme for families with children.[452] Splino Spots have now been set up across twenty oblasts and cater to support children of specific age groups. The support provided includes learning and child development activities, individual educational kits, and referrals to additional services, such as counselling services.[453] A Splino Spots hotline provides additional support for parents seeking humanitarian assistance, with staff able to connect families over the phone to relevant services.[454] By March 2024, over 775,000 individuals had received support through Splino Spots, 480,000 of whom were children.[455] An additional intervention, mobile teams to visit families in areas that have been particularly impacted by the war, has also made promising impacts ensuring the most vulnerable have access to key services.

Parenting support programmes are also imperative for supporting family-based care. This is particularly important in Ukraine's context, where rates of institutional care remain high. Providing parenting classes increases the likelihood that children will be able to stay in family-based care and supports caregivers by promoting positive parenting.[456] Parenting programmes are able to provide financial, socio-emotional, and educational support, making them an essential aspect of Ukraine's child protection system.[457] Strengthening and expanding these parenting programmes is crucial to nurturing the next generation. It is also imperative that these programmes are designed to address the specific needs of vulnerable populations. Thus, they must continue to be prioritised, supported, and scaled up in Ukraine.

3.3.3.4.2 Child care reform

The negative effects of institutionalisation on young children have been well documented across international literature. This type of care is often implemented with the intention of providing a safe environment for children who may lack familial care, but the negative impacts of institutional care on the developmental, emotional, and social well-being of young children cannot be ignored. There is international consensus underpinned by a comprehensive body of international evidence in favour of deinstitutionalisation. This section aims to shed light on the issues by first exploring the detrimental effects of institutional care. The second portion will acknowledge alternative approaches, particularly the advantages of family-based settings, in fostering healthy child development. Additionally, this section will examine evidence from efforts to reduce institutional care in Ukraine and the positive impacts of family-based care on ECD, compared to institutional care.

[448] UNICEF (2022). The Ukraine Parenting Response Project Reaches over 11.5 Million Beneficiaries through Interagency Work, accessed: 21 February 2024. https://www.unodc.org/unodc/prevention/news-and-stories/2022/september/the-ukraine-parenting-response-project-reaches-over-11-5-million-beneficiaries-through-interagency-work-.html
[449] UNFPA (2019). Super Dad Can! Accessed, 21 February 2024. https://ukraine.unfpa.org/en/news/super-dad-can
[450] Ibid.
[451] UNICEF Ukraine (n.d.). Support for Parenting, accessed: 21 February 2024. https://www.unicef.org/ukraine/en/support-parenting
[452] UNICEF (n.d.). Splino – Integrated Humanitarian Support Programme for Families with Children, accessed: 02 April 2024. https://www.unicef.org/ukraine/en/spilno-social-support
[453] Ibid.
[454] Ibid.
[455] Ibid.
[456] Humanitarian Practice Network (2022). Ukraine's Invisible Children: The Urgency of Care Reform, accessed: 21 February 2024. https://odihpn.org/publication/ukraines-invisible-children-the-urgency-of-care-reform/
[457] Ibid.

One of the most significant concerns around institutional care is the potential disruption of healthy attachment and emotional bonds. In institutional settings, children often lack the consistent, individualised care that is crucial for forming secure attachments.[458] In 2003, a landmark study exploring the impacts of institutional care on children under 3 found that the care negatively impacted a child's social behaviour and their ability to form emotional attachments.[459] Positive parenting that is tailored to the unique needs of a child is imperative in helping children develop powerful, healthy relationships.[460] The absence of positive parenting can hinder a child's ability to trust others, regulate emotions effectively, and develop a secure sense of self.[461] The importance of the early years means these deficits may contribute to long-term difficulties in forming healthy relationships and impact a child's emotional well-being throughout their life.[462]

Cognitive development is another area where institutional care can have a negative impact. The limited resources and limited individualised attention available in institutions can hinder a child's intellectual growth.[463] Children in institutional settings may face delays in language acquisition, cognitive skills, and overall intellectual development. Research from Portugal found that institutional care led to developmental delays for infants across cognitive, language, and motor skills.[464] While some of this was attributed to the experiences children had had before they arrived, it was found that institutional care was unable to improve developmental outcomes.[465] The lack of cognitive stimulation and tailored educational activities can impede children's ability to reach their full intellectual potential, which has significant impacts through a child's life. Cognitive delays impact a child's ability to learn in school which will have lifelong economic and human capital impacts.[466]

The psychosocial well-being of children in institutional care is a significant concern. Living in an institutional environment can expose young children to elevated levels of stress caused by factors including: the lack of consistent caregivers, a rigid routine, and limited opportunities for personalised care.[467] This heightened stress can manifest in anxiety, depression, and other mental health issues.[468] Research by Johnson et al. in 2023 found that institutional care had a negative impact on children's mental health, impacts that were exacerbated the longer a child remained in institutional care.[469] The absence of a nurturing and supportive environment may contribute to the development of behavioural problems, making it challenging for children to regulate their emotions and adapt to social situations appropriately.[470]

Ukraine's high rates of institutionalisation are a product of the socio-economic challenges the country has faced and are also a legacy of the Soviet system. Before the full-scale war, nearly 1.5% of children in Ukraine were living in institutions.[471] Mathews et al. noted the role that Ukraine's history continues to play in sustaining support for institutional care as a preferable option.[472] In the present day, families facing economic hardships, limited access to social services, and the psychological effects of war may resort to placing their children in institutions as a desperate measure. Elevated levels of institutional care are also driven by a lack of community-based alternatives and support for families, as well as by stigma against certain groups, such as children with disabilities.[473]

[458] Better Care Network (n.d.). Effects of Institutional Care, accessed: 24 January 2024. https://bettercarenetwork.org/library/particular-threats-to-childrens-care-and-protection/effects-of-institutional-care#:~:text=Common%20issues%20for%20children%20in,of%20stimulation%2C%20and%20harsh%20discipline

[459] Browne K., Hamilton-Giachritsis C., Johnson R., and Ostergren M (2006). Overuse of Institutional Care for Children in Europe. Child-Care Health and Development;32(4):502.

[460] World Health Organization (2018). Nurturing Care for Early Childhood Development, accessed: 24 January 2024. https://nurturing-care.org/resources/Nurturing_Care_Framework_en.pdf

[461] UNICEF (n.d.). The Negative Impact of Institutionalisation on Children 0-3 Years, accessed: 24 January 2024. https://www.unicef.org/ghana/media/3026/file/The%20Negative%20Impact%20of%20Institutionalisation%20on%20Children.pdf

[462] Ibid.

[463] Bapista, J. et al. (2019). Early Family Adversity, Stability and Consistency of Institutional Care and Infant Cognitive, Language and Motor Development across the First Six Months of Institutionalisation, Infant Behaviour and Development, 57(1).

[464] Ibid.

[465] Ibid.

[466] Montana Health School. (n.d.). Cognitive Delays, accessed: 24 January 2024. https://dphhs.mt.gov/schoolhealth/chronichealth/developmentaldisabilities/cognitive-delay#:~:text=Children%20with%20intellectual%20disabilities%20(sometimes,have%20trouble%20learning%20in%20school

[467] UNICEF (n.d.). The Negative Impact of Institutionalisation on Children 0-3 Years, accessed: 24 January 2024. https://www.unicef.org/ghana/media/3026/file/The%20Negative%20Impact%20of%20Institutionalisation%20on%20Children.pdf

[468] Johnson, D. et al., Institutionalisation and Deinstitutionalization of Children: A Systematic Review and Integrative Review of Evidence Regarding Effects on Development, Maestral, accessed: 24 January 2024. https://bettercarenetwork.org/sites/default/files/2023-07/lancet_de-i_commission_systematic_review.pdf

[469] Ibid.

[470] Ibid.

[471] Hope and Homes for Children (2023). Ukraine Crisis: One Year On: Our Response Report, accessed: 28 February 2024. https://www.hopeandhomes.org/publications/ukraine-crisis-one-year-on-report/#:~:text=Nearly%201.5%25%20of%20all%20children,child%20institutionalisation%20in%20the%20world

[472] Dobrova-Krol, N. and van Ijzendoorn, M. (2017). Institutional Care in Ukraine: Historical Underpinnings and Developmental Consequences, Child Maltreatment in Residential Care, accessed: 24 January 2024. https://link.springer.com/chapter/10.1007/978-3-319-57990-0_11

[473] Human Rights Watch (2023). 'We Must Provide a Family, Not Rebuild Orphanges' The Consequences of Russia's Invasion of Ukraine for Children in Ukrainian Residential Institutions, accessed: 24 January 2024. https://reliefweb.int/report/ukraine/we-must-provide-family-not-rebuild-orphanages-consequences-russias-invasion-ukraine-children-ukrainian-residential-institutions

The full-scale war has exacerbated resource and staffing problems in institutions across Ukraine. The war has aggravated the strained resources and overburdened staff within the Ukrainian institutional care system, hindering the development of secure emotional connections critical for a child's healthy growth.[474] Prior to the escalation of the war, children raised in institutions often experienced disruptions in attachment and struggled to form emotional bonds due to limited one-on-one interaction with caregivers. The onset of large-scale fighting saw children relocated to institutions in other parts of the country, overburdening staff to a greater degree and thus hindering child development even further.[475] In 2022, for example, an institution in Lviv stated that they were 'forced to put beds into classrooms' following the arrival of new children from other parts of the country.[476]

How can the child care system be reformed?

Reducing institutional care for young children requires a multifaceted approach addressing the root causes of child separation and promoting family-based alternatives. Ensuring that children can stay with their biological families is a solution, but it is imperative that families are given additional support for this to be a success.[477] Cash transfer programmes can provide families with financial support; while parenting support programmes can be particularly effective in changing parenting behaviours and attitudes, cultivating a healthy environment for a child.[478] Parenting support programmes can teach positive parent-child interaction skills, increase emotional and empathetic communication skills, and help parents learn to be consistent.[479] Not only does this support a child's socioemotional development, but it increases the likelihood that a child will remain in a family setting. Finally, ensuring that families have access to critical social services to better support their care for young children is imperative.

Foster care and adoption play pivotal roles in providing family-based alternatives. Expanding and improving foster care systems ensures children experience stability while awaiting reunification with their biological families or adoption.[480] When returning a child to their biological family is impossible, adoption can provide a permanent, stable home for a child. It is also often more cost-effective than foster care, particularly in the long-term.[481] As mentioned previously, community-based programmes, such as parenting support programmes and mental health support, can ensure that foster care or adoption are a success for both children and caregivers.

Legislative reforms are crucial in promoting family-based alternatives. Enacting laws and policies that prioritise children's rights to grow up in a family environment creates a supportive legal framework and protects children.[482] This includes regulations encouraging family reunification efforts, streamlining adoption procedures, and ensuring necessary resources for families in need. A study conducted across England, Sweden, Lithuania, and Poland found that extensive legislation helped create the environment for family-based care.[483] Legislation was particularly important for setting clear guidelines around what constitutes family-based care and how this can be implemented. Ultimately, a holistic approach, combining legislative reforms, family preservation programmes, foster care, integrated services and benefits provision, adoption, and community-based support can be utilised to create a society where institutional care is not required.

[474] Ibid.
[475] Ibid.
[476] Ibid.
[477] Better Care Network (n.d.). Ending Child Institutionalisation, accessed: 24 January 2024. https://bettercarenetwork.org/library/principles-of-good-care-practices/ending-child-institutionalization#:~:text=Family%20based%20care%20alternatives%20such,family%20reunification%20can%20take%20place.
[478] International Red Cross (n.d.). Parenting Support Programs, accessed: 24 January 2024. https://childprotectionpractitioners.org/child-protection-areas-of-intervention/family-level-interventions/parenting-interventions/#:~:text=There%20are%20several%20elements%20of,setting%20limits%20across%20settings%3B%20and
[479] Ibid.
[480] Better Care Network (n.d.). Ending Child Institutionalisation, accessed: 24 January 2024. https://bettercarenetwork.org/library/principles-of-good-care-practices/ending-child-institutionalization#:~:text=Family%20based%20care%20alternatives%20such,family%20reunification%20can%20take%20place.
[481] University of Pretoria (2000). The Importance of Legislation, accessed: 24 January 2024. https://repository.up.ac.za/handle/2263/14758#:~:text=Legislation%20is%20one%20of%20the,to%20whom%20the%20legislation%20applies
[482] University of Pretoria (2000). The Importance of Legislation, accessed: 24 January 2024. https://repository.up.ac.za/handle/2263/14758#:~:text=Legislation%20is%20one%20of%20the,to%20whom%20the%20legislation%20applies
[483] Eurochild et al. (2021), A Worrisome U-Turn on Ending the Institutionalisation of Children in Ukraine, accessed: 24 January 2024. https://www.eurochild.org/uploads/2021/10/Joint-Statement_Care-reform-in-Ukraine_October-2021.pdf

What has Ukraine been doing to reform its child care system?

In recent years, Ukraine has undertaken significant efforts to shift away from institutional care for young children, recognising the detrimental effects and aiming to create a more supportive and family-centric environment. In 2017, the Government adopted the National Strategy for Reforming the System of Institutional Care and Upbringing of Children (2017-2026).[484] This Strategy focused on moving away from institutional care and towards family-based alternatives.[485] An action plan was put in place for the first phase; and, in June 2020, an action plan for the second phase was published.[486] Key targets from the strategy include reducing the number of institutional care to 1.1%, increasing the support provided to families, and focusing on adoption as a solution.[487] The Strategy also moved towards legally banning children from being placed in institutions.[488] Adding to the social case for deinstitutionalisation has been the importance of deinstitutionalisation as a key target for Ukraine's bid to enter the EU.

Despite these commitments, progress stalled. In June 2021, a series of amendments to the National Strategy were adopted. These moved to exclude certain types of institutions, such as boarding schools for children with disabilities, from the strategy. The legal ban on placing children in institutions was also removed, leaving room for institutionalisation to continue. The onset of full-scale war has also stalled progress towards deinstitutionalisation. The escalation war has had significant impacts: the evacuation of children from the East into institutions in other parts of the country has led to overcrowding; at the same time, prioritising deinstitutionalisation lost momentum during the early months of full-scale war.

However, one key initiative has been the promotion of family preservation programmes, redesigned to support families in the hope that they can stay together. In 2023, the Government of Ukraine, with support from UNICEF, initiated the Better Care programme.[489] Better Care supports caregivers by teaching them positive parenting skills, but also provides access to an integrated service package that includes health, education, social services, and protection services.[490] This type of programme, alongside national cash transfer programmes, aims to keep families together and children out of institutional care.[491] By tackling the underlying issues that lead to child separation, Ukraine seeks to create an environment where families can thrive, and children can grow up in family-based settings.

Additionally, Ukraine has prioritised expanding and improving alternative care options, such as foster care and adoption. This has been a particular focus of the Ministry of Social Policy, which has dedicated time and resources to developing Ukraine's adoption process.[492] Efforts have been made to recruit, train, and support families looking to adopt, including the continuation of cash transfers for families adopting or fostering children.[493] However, the onset of the war has made adoption in Ukraine more challenging. Overseas adoption of children has stalled almost completely; and, from a child protection perspective, international adoptions are not being encouraged during wartime.[494]

What are the benefits of deinstitutionalisation in Ukraine?

Across Eastern Europe, children who have transitioned from institutions to family-based care settings have shown marked improvements in various aspects of their well-being. The nurturing environments provided by families, coupled with individualised attention and a sense of belonging, contribute to healthier attachment patterns, improved language skills, and better overall cognitive development.[495] As a result, these children are more likely to develop into emotionally resilient individuals with the social and cognitive tools needed for a successful future. Research across 20 years has found that family-based care improved children's IQ, physical growth, and overall development.[496] Moreover, it found that these impacts were sustained into adolescence from early childhood.

[484] Ibid.
[485] Ibid.
[486] Ibid.
[487] OHCR (2021). Information on the State of Reform of Institutional Care and Upbringing of Children.
[488] Ibid.
[489] UNICEF (2023). Family for Every Child: The Government of Ukraine and UNICEF Join Efforts to Help as Many Children as Possible Find a Family, accessed: 24 January 2024. https://reliefweb.int/report/ukraine/family-every-child-government-ukraine-and-unicef-join-efforts-help-many-children-possible-find-family-enuk/
[490] Ibid.
[491] Ibid.
[492] Ministry of Social Policy, (n.d.). Children, accessed: 24 January 2024. https://www.msp.gov.ua/en/children/motherhood.php
[493] Ibid.
[494] Connors, E. (2023). Study Highlights Long-Term Benefits of Family-Based Care Following Institutional Care, accessed: 24 January 2024. https://www.psychiatry.org/news-room/news-releases/study-highlights-benefits-of-family-based-care
[495] Ibid.
[496] Ibid.

Ukraine should continue to promote family-based alternatives as the benefits for these ECD interventions are substantial. This Investment Case has already presented the economic argument for deinstitutionalisation, and this section reiterates the important child rights and human capital development benefits that can also be realised. Moreover, additional support for families will make Ukraine an attractive place to return to, and deinstitutionalisation will support Ukraine in their accession process into the EU.

This Investment Case has quantitatively analysed the benefits of deinstitutionalisation, a key aspect of care reform. This has been done through two key impact pathways: firstly, in improvements in cognitive functioning and intelligence, measured through IQ; and secondly, through improvements in safety and security, child attachments, and socio-emotional development. The benefits illustrated below highlight the number of cases of psychiatric disorders that could be averted through deinstitutionalisation, as well as the overall monetary benefits from both impact pathways.

3.3.3.4.3 Safety and security and socio-emotional development leads to long-term improvements in mental health

The Investment Case found that investing in deinstitutionalisation reduces long-term mental health impacts. This benefit occurs due to improvements in safety and security, child attachments, and socio-emotional development, which has a positive impact on a child's mental health over the long-term. The study found that over **16,000** psychiatric cases could be averted in the fast scale-up scenario between 2023 and 2050, while almost **10,000** could be averted in the slow scale-up. The table below details the number of psychiatric cases averted by deinstitutionalisation in both scenarios across different time horizons.

Table 30. The Number of Psychiatric Cases Averted across Different Time Horizons in the Three Scale-Up Scenarios

	2023-2030	2031-2040	2041-2050	2023-2050
Fast				
Number of Psychiatric Cases Averted	2,581	7,086	6,792	16,458
Medium				
Number of Psychiatric Cases Averted	1,063	5,242	6,792	13,096
Slow				
Number of Psychiatric Cases Averted	669	3,300	5,623	9,593

3.3.3.4.4 Monetary Benefits

Deinstitutionalisation has significant monetary benefits. These benefits are derived from the two impact pathways discussed above: improvements in cognitive functioning and intelligence, and improvements in safety and security. These improvements increase the likelihood children will go on to have higher paying jobs, thus increasing their economic contribution to society. In the fast scale-up scenario, the total monetary impact of improving cognitive functioning is over **UAH 5 billion** between 2023 and 2050 (Discounted at 5%). Improving safety and security, and therefore long-term mental health outcomes, could generate over **UAH 46 billion** in the fast scale-up scenario between 2023 and 2050. The table below details the total monetary benefits that could be gained from deinstitutionalisation across different time horizons for both scenarios.

Table 31: The Total Monetary Benefits Accrued from Deinstitutionalisation over Different Time Horizons for All Three Scale-Up Scenarios, in UAH Millions, Discounted at 5%

	2023-2030	2031-2040	2041-2050	2023-2050
Fast				
Impacts of Improvements in Cognitive Functioning	1.1	1.8	0.8	3.7
Improvements in Safety and Security	7.5	14.3	8.5	30
Total Monetary Impact	8.6	16.1	9.3	34
Medium				
Impacts of Improvements in Cognitive Functioning	0.4	1.8	0.8	3
Improvements in Safety and Security	3.1	10.3	8.5	21.9
Total Monetary Impact	3.5	12.1	9.3	24.9
Slow				
Impacts of Improvements in Cognitive Functioning	0.3	0.8	0.7	1.8
Improvements in Safety and Security	1.9	6.4	6.9	15.3
Total Monetary Impact	2.2	7.2	7.6	17

3.3.3.4.5 Benefits – Cost Savings

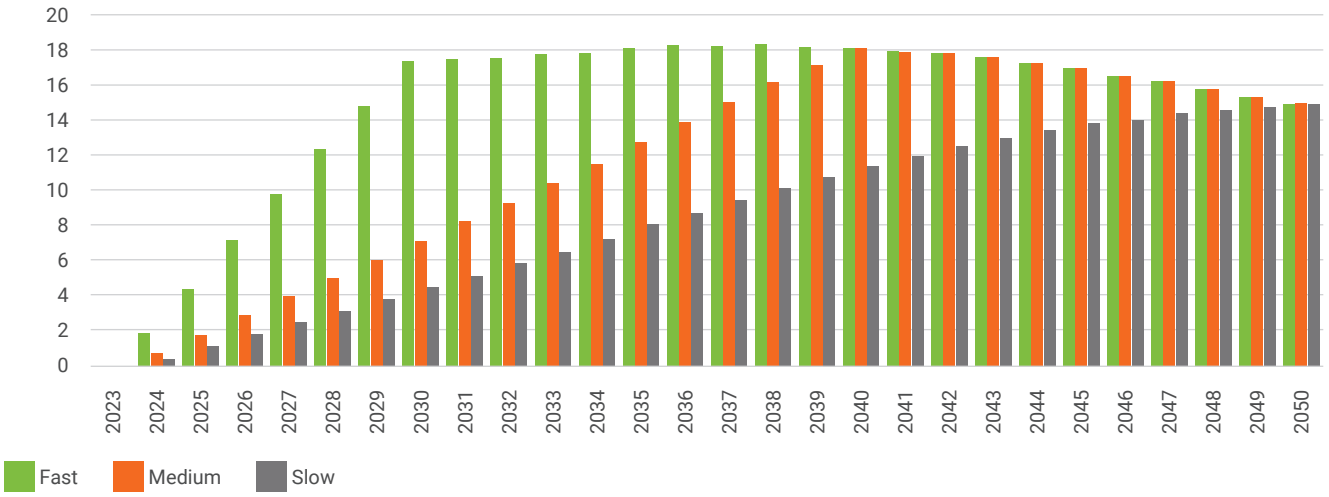
There are additional monetary benefits associated with deinstitutionalisation due to cost savings. Institutional care is very expensive, meaning that scaling it down and replacing it with family-based care will eventually **save costs** for Ukraine. The table below presents the monetary benefits for deinstitutionalisation when cost savings are combined with the monetary economic benefits gained. This reiterates the importance of care reform; it should happen as quickly and as efficiently as possible to realise these significant benefits.

In the fast scenario, the total monetary benefits could reach over **UAH 400 billion** between 2023-2050, in the medium – **UAH 300 billion**, and in the slow – **UAH 200 billion**.

Table 32: The Total Monetary Benefits Accrued from Deinstitutionalisation over Different Time Horizons in all scenarios, in UAH Billions, Discounted at 5%

	2023-2030	2031-2040	2041-2050	2023-2050
Fast				
Economic Gains from Benefits	8.6	16.1	9.3	34
Economic Gains from Savings	59	164	157	380
Total Monetary Impact	68	180	166	414
Medium				
Economic Gains from Benefits	3.5	12.1	9.3	24.9
Economic Gains from Savings	24.4	120.9	156.7	302
Total Monetary Impact	27.5	133	166	326.5
Slow				
Economic Gains from Benefits	2.2	7.2	7.6	17
Economic Gains from Savings	15.3	76.1	129.8	221.2
Total Monetary Impact	17.5	83.3	137.4	235.2

Figure 42. Total Monetary Benefits from Deinstitutionalisation, in UAH Billions, Discounted at 5%



3.3.4 Economic Evaluation

The COI illustrates that the economic losses will be substantial across Ukraine if the Government does not invest in social protection and child protection, while the benefit-cost ratio presents the rate of return. This section illustrates these significant economic costs and the substantial rates of return for social protection and child protection. Due to the nature of the analysis that was conducted for social protection, it is necessary to display the COI and the BCR separately for cash transfer programmes, parental leave, and deinstitutionalisation. The details of this analysis can be found below.

The COI is calculated by determining the total additional economic benefit of the scale-up scenario (compared to the baseline), less the costs of the scale-up. Thus, the COI can contextualise the numbers used in the cost and benefit sections above, as it illustrates what the total economic benefit of the programme would be to Ukraine's economy, less

the costs of the programme. BCRs compare the total additional monetary benefits of the intervention with the total additional costs, both compared to the baseline scenario, which maintains the status quo. The ratios represent how much money is returned to the economy for every UAH invested in the care reform through deinstitutionalization.

3.3.4.1 Cash Transfers

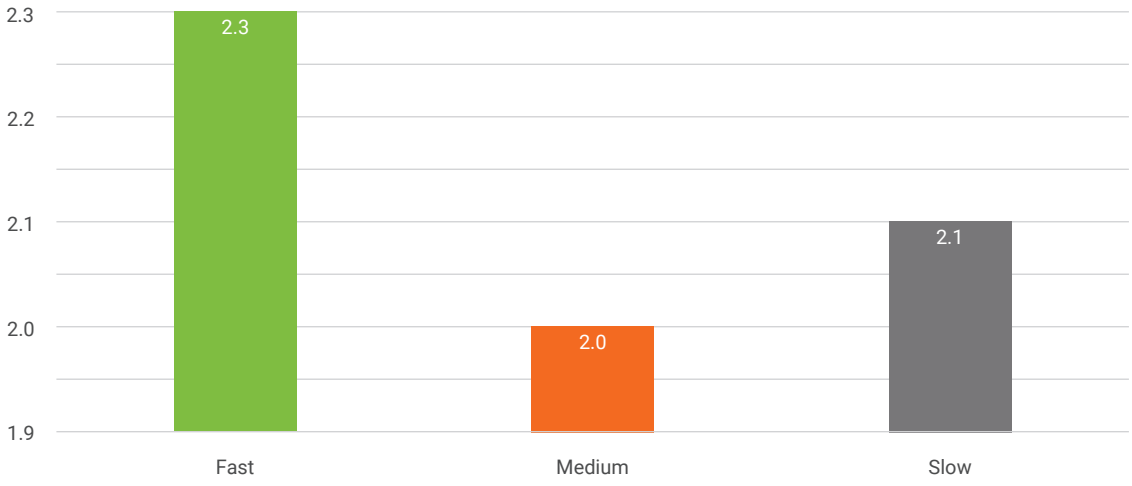
The economic cost of not investing in cash transfer programmes is significant. Table 33 displays the results from the COI analysis. Not upscaling social protection would cost Ukraine over twenty-six years more than UAH 447 billion under the fast scenario, and over UAH 251 billion under the slow scenario. The cost of inaction is almost double the amount under the fast scenario than the slow.

Table 33. Economic Benefits, Costs, and the Cost of Inaction for the Three Scale-Up Scenarios, in UAH Billions, Discounted at 5%

	Fast	Medium	Slow
Total Costs	357	302	227
Total Benefits	804	602	478
Cost of Inaction	**447**	**300**	**251**

Investment in improved social protection programmes is projected to reap at least a two-fold return over the short- and long-term. In the fast scenario, for every UAH 1 invested in social protection, UAH 2.3 is expected to be returned over the time horizon. The graph below depicts the benefit-cost ratios over all three scale-up scenarios across the short-, medium-, and long-term.

Figure 43. The rate of return on investment for every 1 UAH invested between 2023 and 2050 for all three scale-up scenarios, Discounted at 5%



3.3.4.2 Parental Leave

There are also economic costs to maintaining the status quo for paid parental leave. Table 34 displays the results from the COI analysis. Over twenty-seven years, not extending the duration of parental leave would cost Ukraine just over UAH 7 billion, under the scale-up scenario.

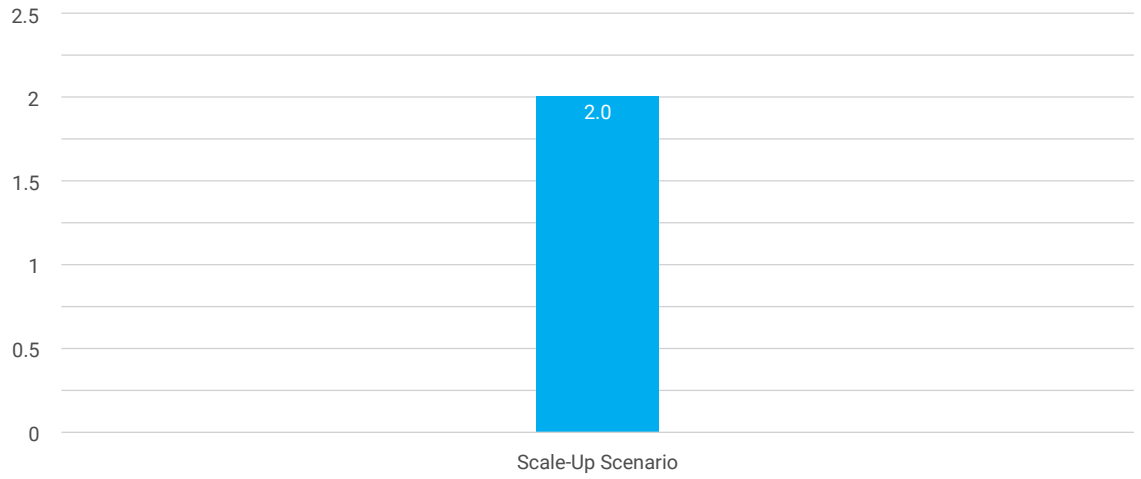
Table 34. Economic Benefits, Costs, and the Cost of Inaction for the Scale-Up Scenario, in UAH Billions, Discounted at 5%

	Scale-Up Scenario
Total Costs	7.2
Total Benefits	14.5
Cost of Inaction	**7.2**

Investment in improved parental leave is projected to have a strong BCR. Improving parental leave is an additional cost that will have long-term benefits for both children and caregivers:

When considering the scale-up scenario, for every **UAH 1 invested**, between 2023 and 2050, **UAH 2 is returned** to the economy. This means that Ukraine could gain double the amount of funds that are invested.

Figure 43. The rate of return on investment for every 1 UAH invested between 2023 and 2050 for all three scale-up scenarios, Discounted at 5%



3.3.4.3 Deinstitutionalisation

There is a significant COI associated with maintaining rates of institutional care. Table 35 displays the results from the COI analysis. Over twenty-seven years, maintaining institutional care would cost Ukraine over **UAH 378 billion in the fast scenario, and over UAH 40 billion under the slow scenario.**

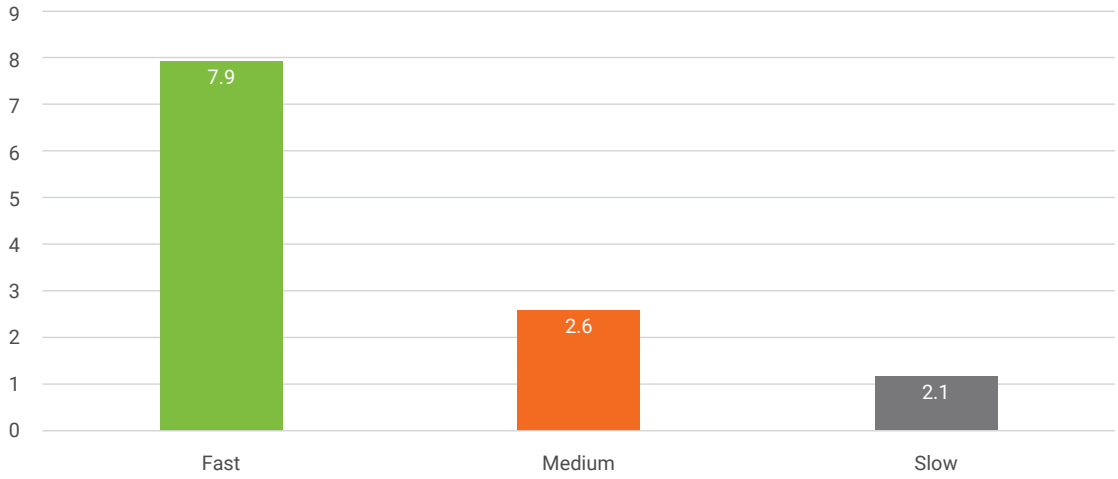
Table 35. Economic Benefits, Costs, and the Cost of Inaction for all Three Scale-Up Scenarios, in UAH Billions, Discounted at 5%

	Fast	Medium	Slow
Total Costs	56	127	204
Total Benefits	434	339	244
Cost of Inaction	**378**	**212**	**40**

Due to the significant costs associated with institutional care, the cost of inaction is much lower for the slow scale-up scenario.

Deinstitutionalisation is expected to reap returns of over 7 fold in the fast scale-up scenario over the study period. The slow scale-up scenario does not return a positive BCR until the end of the period. This is because the costs of institutional care are remarkably high and fewer children experience the benefits of family-based care in this scenario. This reiterates the importance of deinstitutionalising as quickly as possible. The BCR increases rapidly as it accounts for both the benefits accrued from reducing institutional care and the costs saved. As such, deinstitutionalisation is imperative for Ukraine and doing this rapidly should be prioritised. The table below depicts BCRs across the different scale-up scenarios for different time horizons.

Figure 43. The rate of return on investment for every 1 UAH invested between 2023 and 2050 for all three scale-up scenarios, Discounted at 5%



This section of the report presented the findings of an analysis into social protection and child protection. This illustrates the importance of continued investment into social protection and child protection.

Box 30: Social Protection and Child Protection

Investing in social protection and child protection initiatives will ensure that Ukraine **continues to develop comprehensive social protection and child protection systems** to assist children and caregivers. This investment will support the development of children ensuring they become **prosperous working-age adults**. Continued investment will help encourage people to **return to Ukraine**. Return is more likely if a comprehensive range of services are available to provide support.

3.4 Water, Sanitation, and Hygiene

3.4.1 Overview

Water, sanitation, and hygiene (WASH) services are a critical input into the enabling environment for ECD. The benefits of WASH coverage are felt across the population but are often especially felt by young children. WASH services, including safe drinking water and sanitation, are particularly linked to lowering preventable mortality and morbidity (caused, for example, by diarrhoea and pneumonia).[497] For this reason, core WASH services form the enabling environment for positive outcomes in early childhood. This study models the scale-up of two WASH interventions; these interventions, alongside the baseline and target rates, are displayed in Table 36.

In Ukraine, the WASH sector has faced considerable challenges since the escalation of war in February 2022. Damage to WASH infrastructure has been significant, impacting infrastructure that was often already old and dilapidated. By December 2022, it was estimated that half of Ukraine's energy infrastructure had been destroyed, leaving millions of people without reliable water for consumption.[498] This significant damage to electricity infrastructure has impacted families' water supply and the quality of water they are able to access.[499] While most households have access to water, the quality of water supplies have been significantly affected, reducing its safety.[500] Moreover, households have noticed an increase in the price of basic sanitation items, which has made it harder for all households to meet their sanitation needs.[501] As such, it is imperative that Ukraine invests in the WASH sector as a crucial aspect of post-war recovery.

[497] Petermann-Rocha, F., Rao, N., Bala, M. et al. (2023). Hygiene Practices and Early Childhood Development in the Asia-Pacific Region: A Cross-Sectional Analysis, Int. J. Environ. Res. Public Health, 20(4), 2798.
[498] REACH (2023). WASH Needs Assessment, accessed: 30 April 2024.
[499] Ibid.
[500] Ibid.
[501] Ibid.

Intervention	Included in the Economic Evaluation	Baseline	Target
Basic Sanitation	Economic Evaluation	98%	100%
Safely Managed Water	Economic Evaluation	70%	100%

This section depicts the significant benefits that could be gleaned from investment into WASH interventions. These benefits extend from ensuring all children have access to clean water, to improved health and nutrition outcomes and significant economic growth. The key findings from the analysis of the WASH package can be found below. These findings will be discussed in more detail in the following section. Please note that, due to data limitations, it was not possible to generate comprehensive benefit-cost ratios for WASH interventions. However, this report highlights the significant monetary benefits that would be gleamed by scaling-up WASH interventions, as well as the cost of inaction.

Box 31. Key Messages from the WASH Section

- Investing in WASH interventions could generate significant economic gains for Ukraine. In the fast scale-up scenario the economic benefits could reach nearly 245 UAH billion between 2023 and 2050. Meanwhile, the cost-of-inaction is expected to reach almost 32 UAH billion.
- Investments into WASH interventions are likely to generate efficiency savings across the health sector. In the fast scale-up scenario by 2050, it is estimated that UAH 143 million would be saved due to the long-term health benefits of a strong WASH system.
- The health benefits of investments into WASH interventions could also lead to a significant growth in parents time, allowing them to spend time on activities that will lead to economic growth. It is estimated that nearly UAH 12 billion could be generated from saved time for parents between 2023 and 2050.
- The benefits of good WASH extent far beyond what was able to be modelled in this investment case. The benefits are also likely to be substantial across society, rather than just impacting children under six.
- These benefits are paramount for Ukraine given the ongoing effects of the war which has impacted access to WASH facilities. Not only will investments in WASH have long-term benefits, but they are also likely to make Ukraine a more stable and prosperous country, encouraging people to return.

3.4.2 Cost Estimates

3.4.2.1 Methodology

To model our two interventions – basic sanitation and safely managed water – a model was built using input data from the WASH Sustainable Development Goal (SDG) Costing Tool.[502] This tool was created by UNICEF in 2017 and updated in 2020. It was designed to support countries in reaching SDG targets 6.1 and 6.2 by calculating investment requirements and financing gaps. The WASH SDG Costing Tool includes unit cost estimates (annualised, per capita) for providing water and sanitation services by country, disaggregated by capital and recurrent spending, and by urban/rural regions. The total annualised unit costs of water (e.g., dug well) and sanitation (e.g., [wet] pit latrines) services (including recurrent and capital spending) for urban and rural regions in Ukraine were extracted. These cost estimates were taken from 2016 and were increased in line with historic and projected inflation rates for each year to 2050.[503] Next, an annual blended unit cost estimate for the country was created by weighting the unit costs according to an estimated proportion of the population in urban and rural areas.[504] Finally, these unit costs estimates were applied to the population receiving the service under each scenario. The costs of the scale-up scenarios were compared to the baseline scenario to create an additional cost estimate for each scale-up. These costs were also discounted at a rate of 5%.

[502] The WASH Sustainable Development Goal (SDG) Costing Tool https://www.sanitationandwaterforall.org/tools-portal/tool/sdg-costing-tool
[503] IMF (2024). Ukraine.
[504] Projections for urbanisation in Ukraine were pulled from: United Nations Department of Economic and Social Affairs - Populations Dynamics (2018). 2018 Revision of World Urbanisation Prospects.

3.4.2.2 Cost Findings

The additional costs highlight how costs are anticipated to change between the scale-up scenarios. In total, the fast scenario is anticipated to cost UAH 212.8 billion over the 26 years of the study time horizon. These costs average, annually, UAH 8.1 billion. This amount is lower under the slower scale-up scenarios. Under the medium scenario, the total additional cost is UAH 166.5 billion, or an annual average of UAH 6.4 billion. For the slow scenario, this falls further to UAH 121.9 billion, with an annual average of UAH 4.6 billion. The higher costs under the first two scale-ups are due to a higher number of beneficiaries and the costs of scale-up being concentrated upfront (owing to the faster scale-up) when they have a higher value in the present than costs that will occur later. This is because costs are discounted at a rate of 5%.

Table 37: Additional Costs for Fast, Medium, and Slow Scale-up Scenarios 2023-2050, in Total and Annual Average, in UAH Billions, Adjusted for Inflation, Discounted at 5%

	Fast	Medium	Slow
Entire Period	212.8	166.5	121.9
Annual Average	8.1	6.4	4.6

Improving coverage of safely managed water is expected to drive resource requirements under these scale-up scenarios. Under all three scale-up scenarios, the costs of improving safely managed water are expected to amount to around 85% of all costs. This is due to the relatively lower coverage of safely managed water (compared to basic sanitation) and the higher unit costs.

3.4.3 Benefits

3.4.3.1 Methodology

The benefits of WASH were calculated in terms of the direct health benefits, as well as the potential time savings and health system efficiencies associated with reducing the burden of disease. These benefits were both calculated in Spectrum's OHT and a custom-built Excel model. Impact data are available for all four interventions on the OHT for Ukraine; therefore, the pre-existing projections for costing were used.[505] The projections were run to extract deaths in each scenario (baseline, slow, medium, fast). A comparative analysis of these outputs was run to find the lives saved because of the interventions being scaled up. Deaths averted were then used to estimate averted lost DALYs (following the same methodology outlined in the Health and Nutrition Section [3.2.3.1]). The OHT projections also allowed for extracting outputs related to the number of cases of diarrhoea and stunting cases averted because of scale-up.

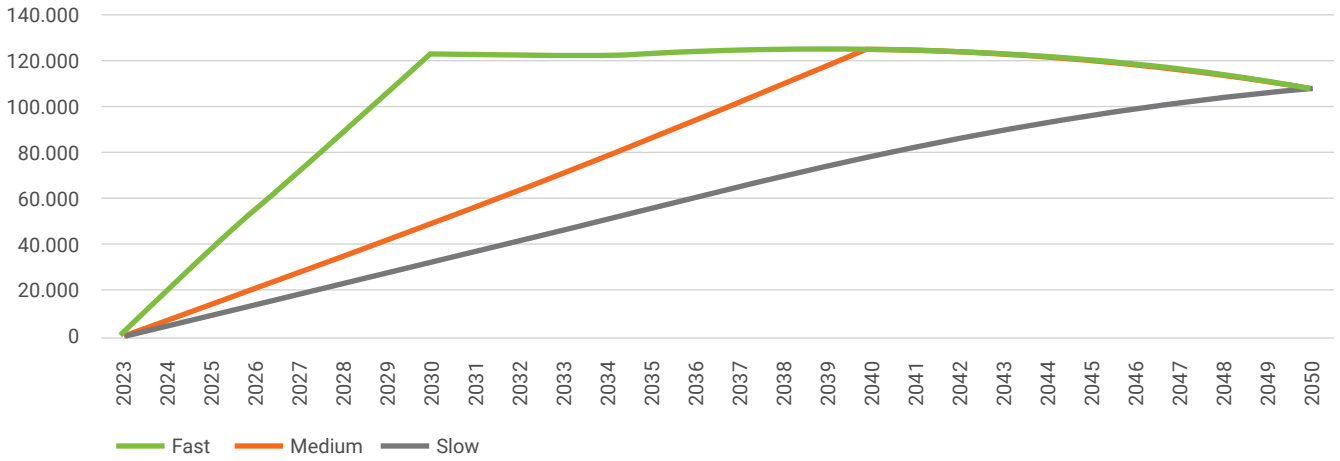
The benefits of scaling up WASH interventions were then monetised. A monetary value of USD 17,400 per DALY was adopted for this analysis. This DALY value was the upper estimate adopted in a recent WaterAid global Investment Case for WASH.[506] The model also estimated the economic value of averting childhood stunting cases. This value was calculated by increasing future earnings via gains in productivity and improvements in cognitive development per stunting case averted.[507] Savings were also estimated because of averted disease burden (reduced child diarrhoea). These savings were both to the health system (by estimating the treatment costs averted) and to parents/caregivers (by estimating time saved that would otherwise have been spent caring for sick children).[508] All monetary benefits were then totalled and discounted at a rate of 5%.

[505] Costing data were not available in OHT for basic sanitation and safely managed water.
[506] WaterAid (2021). Mission-Critical: Invest in Water, Sanitation, and Hygiene for a Healthy and Green Economic Recovery.
[507] Hoddinott, J., Alderman, H., Behrman, J. et. Al. (2013). The Economic Rationale for Investing in Stunting Reduction, Maternal and Child Nutrition, 9:s2, 69-82; Hoddinott J., Maluccio J., Behrman R. et al. (2011). The Consequences of Early Childhood Growth Failure over the Life Course. Discussion Paper 1073, International Food Policy Research Institute: Washington, DC.
[508] Based on methodology from: Hutton, G. (2012). Global Costs and Benefits of Drinking-Water Supply and Sanitation Interventions to Reach the MDG Target and Universal Coverage, (World Health Organisation: Geneva, Switzerland).

3.4.3.2 Findings: Improved Health and Development Outcomes

Improving WASH coverage would be expected to reduce the preventable disease burden affecting young children in Ukraine. The number of people seeking care for diarrhoea would be reduced significantly by 2050 (Figure 46). In the fast scale-up scenario, almost 3 million would not need to seek care for diarrhoea by 2050. In the medium scenario, this number would be 2.2 million, falling to 1.6 million in the slow scenario.

Figure 46. Number of People No Longer Seeking Care for Diarrhoea under Fast, Medium, and Slow Scale-up Scenarios, 2023-2050, for All Case Types (Mild, Moderate, and Severe)



This reduction in diarrhoea cases would lead to better health outcomes across the population, especially among young children. While deaths from diarrhoea are already low in Ukraine, historic data show that deaths from these causes do still occur. Reducing the incidence of these diseases, therefore, is expected to be lifesaving. The projected number of children's lives saved from the increased coverage of WASH interventions is depicted in Figure 47. By 2030, 11 - 39 children's lives could be saved (depending on the scenario); and, by 2050, this would increase to up to 236. Morbidity would also be substantially reduced and a substantial number of DALYs would be saved because of a scale-up (Table 38).

Figure 47. Deaths Averted in Under-Fives in Ukraine under Fast, Medium, and Slow Scale-up Scenarios, for 2023-2030 and 2023-2050 (Cumulative)

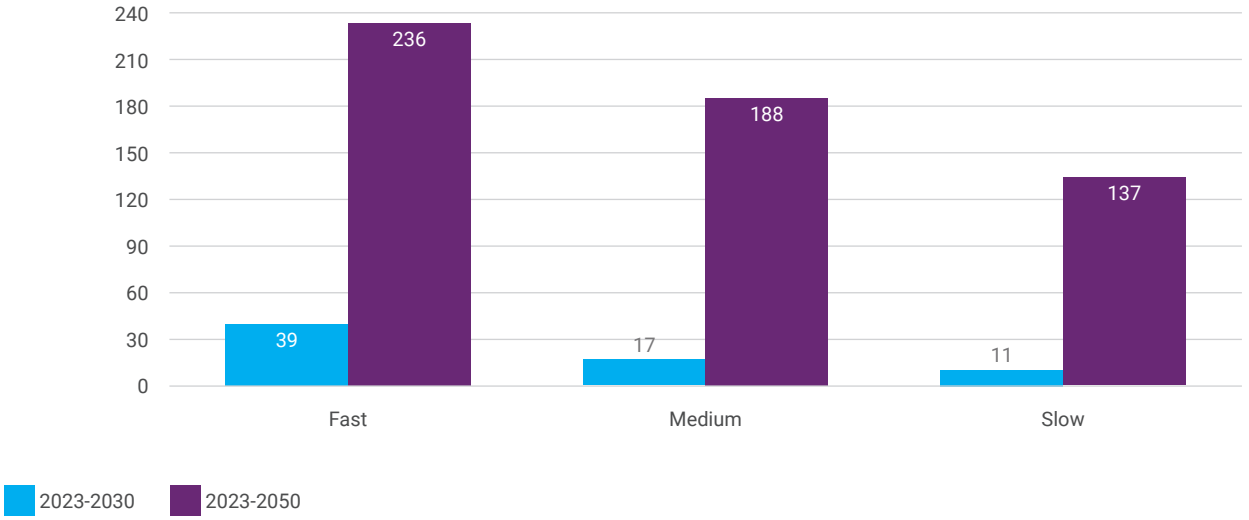
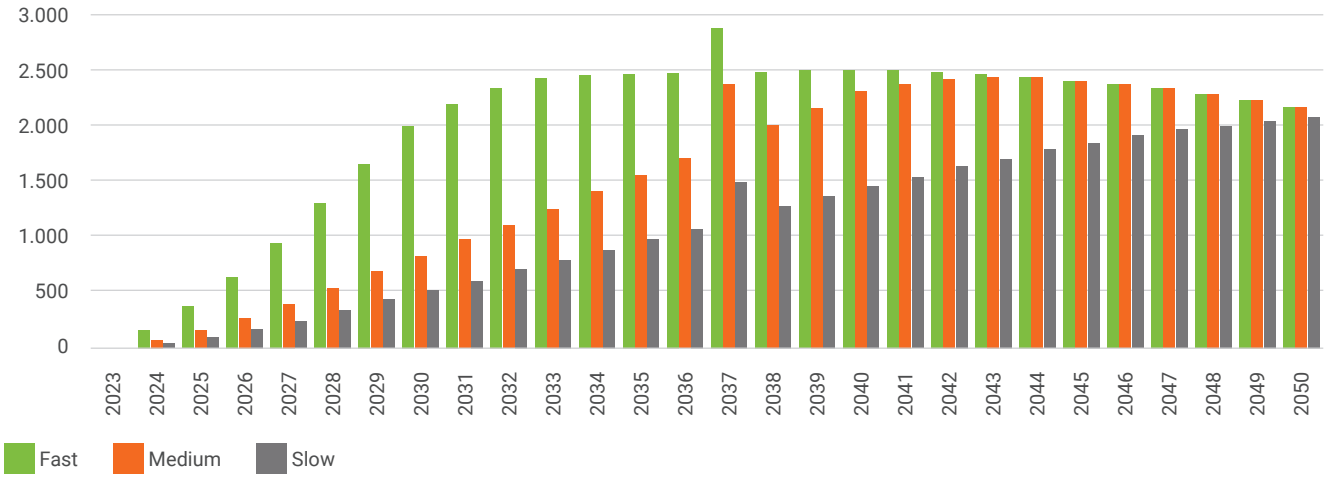


Table 38. Lost DALYs Averted by Reducing Diarrhoea Cases for Fast, Medium, and Slow Scale-up Scenarios, 2023-2050

	Fast	Medium	Slow
Diarrhoea	17,573	13,995	10,203
Total	**17,573**	**13,995**	**10,203**

Childhood stunting would also be expected to fall under improved coverage of WASH interventions, as fewer children would suffer from sustained exposure to enteric pathogens.[509] This impact has been modelled, and the number of stunting cases that could be prevented each year calculated (Figure 48). Across the study time horizon (2023-2050), it is estimated that 1,186 stunting cases could be averted each year under the slow scenario. This would be even higher in the faster scenarios: 1,655 cases averted each year in the medium scenario, and 2,131 in the fast scenario. For every case of stunting averted, there will be short- and long-term consequences, including reduced risk of morbidity and mortality, reduced risk of infections and non-communicable disease; lower risk of suffering from diabetes, hypertension, or unfavourable maternal outcomes in adulthood; and, improved child development outcomes and better learning capacity.[510]

Figure 48. Stunting Cases Averted in Fast, Medium, and Slow Scale-up Scenarios, 2023-2050



3.4.3.3 Findings: Efficiency Savings

These improvements to health and development outcomes for young children would be expected to drive efficiency savings both for the health sector and for families. From a health efficiency perspective, for every case of diarrhoea or stunting that is prevented, potential costs of treatment will also be averted. This preventative approach means that health sector costs are lower, which can free up resources to be spent on other services and interventions. Not every diarrhoeal case will require medical attention; however, on average, around 35% of diarrhoeal cases are moderate-severe, and medical care is sought in roughly 41% of cases.[511] In an estimated 3-4% of cases, diarrhoea cases will require hospitalisation or in-patient care.[512] The costs related to treat diarrhoea among young children (who are often most susceptible to these disease burden areas) can become very high. The average cost per outpatient visit in Ukraine is estimated at UAH 566, whilst for inpatient visits this rises to UAH 18,043.[513] Preventing diarrhoea, therefore, through adequate WASH provision could save the health sector substantial resources. In the fast scenario, the economic impact of scaling up WASH interventions is estimated at UAH 7.7 billion between 2023 and 2030; UAH 3.1 billion in the medium scenario, and UAH 2 in the slow.

[509] Cumming, O. and Cairncross, S. (2016). Can Water, Sanitation and Hygiene Help Eliminate Stunting? Current Evidence and Policy Implications, Matern Child Nutrition, 12(Suppl 1), 91-104.
[510] Soliman, A., de Sanctis, V., and Alaaraj, A. et al. (2021). Early and Long-Term Consequences of Nutritional Stunting: From Childhood to Adulthood', Acta Biomed, 92(1), e2021168.
[511] Lamberti, L., Fischer Walker, C. and Black, R. (2012). Systematic Review of Diarrhea Duration and Severity in Children and Adults in Low- and Middle-Income Countries, BMC Public Health, 12, 276.
[512] Hutton, C. (2012). Global Costs and Benefits of Drinking-Water Supply and Sanitation Interventions to Reach the MDG Target and Universal Coverage, (World Health Organization: Geneva, Switzerland).
[513] IHME (2018). Global Inpatient and Outpatient Health Care Utilization, Unit Costs, and Costs and Services Needed to Achieve Universal Health Coverage 1990-2016, (IHME: Seattle, United States of America).

Savings would also be expected at the household level, as parents (or other caregivers) would benefit from having time that otherwise would have been spent caring for sick children. When children are suffering from diarrhoea, their caregivers often must spend time caring for them, which reduces their ability to engage in other activities, including income-generating work.[514] The burden of caring for sick children often falls to women, including the child's mother, which can impact their employment and career potential.[515] By preventing cases of diarrhoea households no longer face the opportunity cost of ill health.

3.4.3.4 Findings: Monetary Benefits

The economic benefits of scaling up these WASH interventions is high. Together, these impact pathways (reducing DALYs lost, averting stunting, health system efficiencies, and caregiver time savings) produce a monetary value of up to UAH 245 billion (Table 39). These benefits are the sum of improving the coverage of WASH interventions across the entire study time horizon (2023-2050). Some of these benefits would be felt immediately (e.g., healthcare savings from reduced disease burden); others, such as improved cognitive functioning and productivity for children who would no longer experience stunting, would be felt over the life course.

Importantly, these estimates are likely under-estimates. These figures do not account for all the benefits of WASH interventions, as many of the impacts are difficult (if not impossible) to quantify. This includes benefits such as improved wellbeing and happiness, and better self-esteem or mental health. These impacts are likely to be far-reaching, as WASH interventions will benefit the entire population, rather than only targeting young children and their families.

Table 39. Monetised Additional Benefits under Fast, Medium, and Slow Scenarios, in UAH Billions, Discounted at 5%

Fast	Medium	Slow
245.3	184.4	130.7

3.4.4 Economic Evaluation

Finally, a comparison of the costs and benefits shows a large opportunity cost for failing to scale-up these WASH interventions. For children, growing up in a clean and safe environment helps them to survive and thrive, preventing them from suffering from preventable diseases and poorer nutritional outcomes. In total, the cost of inaction of not improving coverage of WASH interventions could amount to nearly UAH 9 billion under the slow scenario. The cost of inaction is even higher under the faster scale-up scenarios, illustrating that there is opportunity cost and economic returns foregone if coverage does not increase rapidly. Under the fast scenario, the cost of inaction is more than double that of the slow scenario – at over UAH 32 billion.

Table 40. Economic Benefits, Costs, and Cost of Inaction for the Fast, Medium, and Slow Scale-up Scenarios, in UAH Billions, Discounted at 5%

	Fast	Medium	Slow
Total Costs	212.8	166.5	121.9
Total Benefits	245.3	184.4	130.7
Cost of Inaction	**32.5**	**17.8**	**8.7**

This section has detailed the significant benefits associated with investments in WASH interventions. These investments are economically and socially imperative for Ukraine.

[514] Hutton, G. (2012). Global Costs and Benefits of Drinking-Water Supply and Sanitation Interventions to Reach the MDG Target and Universal Coverage, (World Health Organization: Geneva, Switzerland); Schot, M., Dekker, A., van Werkhoven, C. et al. (2019). Burden of Disease in Children with Respiratory Tract Infections in Primary Care: A Diary-Based Cohort Study, Fam Pract., 36(6), 723-729.

[515] Charmes, J. (2019). Unpaid Care Work and the Labor Market: An Analysis of Time Use Data Based on the Latest World Compilation of Time-Use Surveys, (Geneva: ILO).

Box 32. The Importance of Investment in WASH

There are strong moral, social, and economic arguments for investing in WASH services. Access to WASH services are human rights and are essential to a person's sense of wellbeing, dignity, and respect. The war has led to damage to critical infrastructure, and climate change has added pressure on services. Thus, Ukraine must focus on improving services in four key strands of WASH: drinking water quality, waste and wastewater treatment, infection prevention and control (especially in schools and healthcare facilities), and climate adaptation and environmental sustainability. These interventions will help ensure that the next generation of Ukrainians grow up to be healthy working-age adults who will support Ukraine's economic development.

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4

Conclusions and Policy Recommendations

4.1 Conclusions

This study provides comprehensive empirical evidence that supports the case for investment in ECD in Ukraine. Consistent with findings from international literature, this study finds that scaling up multi-sectoral ECD interventions in Ukraine is cost-effective and will have strong benefit-cost ratios in the long term. To reiterate some of the headline findings:

- Scaling up quality ECEC could **prevent up to 500,000 repeated years** of schooling between 2023-2050 and create **over 16,000 productive jobs**.
- Investing in essential health and nutrition interventions could prevent **13 thousand child deaths** and create a **return on investment of 8 times** between 2023 and 2050.
- Investing in WASH interventions could **avert a cost of inaction of over 330 billion UAH** between 2023 and 2050, while averting **95 thousand stunting cases**.
- Investing in cash transfers could lead to a **return on investment of 3.5 times** over the period, while increasing the duration of parental leave could result in a **return on investment of 2 times.**

There are additional urgent arguments for why Ukraine should invest more in children now:

- Providing today's children with access to quality ECD services will **equip Ukraine with the dynamic future workforce that will drive tomorrow's prosperous and competitive economy**. Ukraine faces an aging population, where the dependency ratio (the proportion of working age to dependent population) is decreasing. Today's young children are tomorrow's labour force and investment into ECD services to maximise child development will support them in realising their full productive potential.
- Quality ECD services and employment opportunities would be key **quality of life and economic pull factors to attract young families back to Ukraine**. Young families are the highest proportion of those emigrating and represent a critical demographic for Ukraine. It is therefore imperative that Ukraine develops a society that this group want to return to. Although it is not the only determinant, quality ECD services are highly attractive for families with young children or young adults planning for parenthood. Similarly, the skilled employment opportunities created by expanding ECE services will provide attractive economic opportunities for the returning population.
- **National development** will be at the heart of new jobs in ECD. Centring on the nurturing of Ukraine's children and the building of a thriving Ukraine of tomorrow, these roles will create opportunities not just for **youth employment** but for **young adults to participate meaningfully in Ukraine's recovery**. Purposeful employment for young people will support the development of a **strong national identity**.
- **Women's re-entry into the workforce** will be supported by expanding quality ECEC services. The demographic and economic challenges arising from the war mean that Ukraine must build back a society and systems that support caregivers (especially female) to enter or re-enter the labour market as soon as possible. This is imperative to rebuilding economic growth. Moreover, more equitable sharing of paid and unpaid care work between men and women **will support gender equality and women's empowerment**.
- **Ukraine's accession into the EU** will be supported by the continued development of social services and a focus on integrated ECD. Childcare reform and increasing family-based care over institutional care are a particular priority for the EU. Reduction of the gender pay gap is a further requirement for EU accession, and the creation of quality jobs and increased employment for women will contribute to this.

When considering investments in ECD, it is imperative to consider spending *enough* and spending *well*. Ukraine's expenditure on education in 2021 represented 17% of total expenditure, while in the same year expenditure on health made up 11%. For comparison, international targets hold that education expenditure should reach 15-20% of the budget and health around 15%.[516] Expenditure in absolute terms across the social sectors increased from 2022 to 2023 (education by 6% and health by 1%) and is set to increase again in 2024. But, as an overall proportion of the budget, this expenditure is decreasing.[517] It should also be noted that an increase in absolute spending was made possible in part by an increase in ODA. However, the efficiency and equity of spending is also paramount. A minimum package of quality nurturing care interventions across the social sectors must be guaranteed for all children, particularly those who are particularly vulnerable (e.g., internally displaced children, children with disabilities or developmental delays). When rolling out ECD services, it is also important to minimise resource wastage and to maximise positive child development outcomes. Therefore, spending *enough* and spending *well* can ensure that Ukraine effectively scales up ECD investment, ensuring the development of a prosperous, thriving working-age population.

Ukraine is presented with a major opportunity to increase investments in young children. This study presents solid evidence for increased investment in ECD that benefit Ukraine today but more so in the future. This study has established that investing in comprehensive, integrated ECD in Ukraine has exceptionally high returns on investments. In addition, there are other powerful and urgent reasons why investing in ECD is strategically critical for the success of the country: the structure of the population (exacerbated by young families who have fled the country), the need to build a country young Ukrainians can return to, the need to attract a large share of the working population into the labour market, and the requirements for EU accession. Access to high-quality services for all Ukrainian children is the best way to realise these fundamental goals.

[516] Authors' calculations, based on data from: Ministry of Finance of Ukraine (2024). Open Budget: Expenses - Functional Classification – Consolidated Budgets, accessed: 4 April 2024. http://openbudget.gov.ua/national-budget/expenses?class=functional&view=table

[517] Ibid. Education expenditure rose from UAH 290.8bn in 2022 to 308.6bn in 2023 and is budgeted at 338.5bn in 2024; health expenditure rose from 215.2bn in 2022 to 217.4bn in 2023 and is budgeted at 232.1bn in 2024.

4.2 Recommendations

4.2.1 Recommendations Across ECD

1 **The Government of Ukraine should consider developing an overarching ECD policy and supporting strategy.**

This strategy would guide efforts in the different sectors that contribute to outcomes among young children and support harmonised, holistic, and coherent policy programming. Developing an ECD policy will require multi-stakeholder participation and contribution, especially from contributing Government ministries, departments, and agencies (spanning health, education, social policy, and WASH). It might be beneficial if one lead ministry or a specific Government body (e.g., a Taskforce) was identified to spearhead and oversee the policy and its implementation. Development partners and other actors could provide a supportive role, offering technical assistance in the development of the policy and participate in stakeholder engagements.

2 **The Government of Ukraine is strongly recommended to support the scale-up of the interventions included in this ECD package within the shortest possible time frame.**

Sectoral line ministries could develop costed strategies to prioritise the roll-out of these interventions and integrate a scale-up into their existing plans. Development partners, non-governmental actors, service providers, and communities can be encouraged to support these efforts and to contribute (whether through financial resource, technical input, implementation, and delivery, or through consultation). Ideally, these efforts will be guided by, and harmonised with, an overarching ECD policy and strategy (See first recommendation). In these costed strategies and plans, the Government and its partners are advised to strongly consider the prioritisation and sequencing of efforts. It will be challenging to scale up all interventions simultaneously. Therefore, identifying priority interventions and target groups (e.g., based on need, equity, or cost-effectiveness criteria) will be an important activity.

3 **The Government of Ukraine and its partners could develop a more detailed fiscal space analysis and financing plan to support this scale-up of ECD services.**

Exploring different avenues for meeting the resource requirements of this scale-up will be important given the uncertain future Ukraine faces. It will be necessary to consider different approaches to financing the scale-up of ECD interventions to account for unpredictability in the short- to medium-term. This might include drawing on alternative or innovative financing modalities to reduce fiscal liabilities, e.g., through partnerships with the private sector.

4 **Line ministries, working alongside the Ministry of Finance, are recommended to begin engaging in regular budgeting and expenditure tracking activities for ECD.**

This exercise is best done routinely and may consist of budget tagging for ECD initiatives within and across sectors/ministries or other elements of public finance management reform. This activity will make it easier to track spending towards ECD and monitor whether the Government is adequately, equitably, and effectively allocating and spending on ECD (ideally by comparing this spending with carefully costed scale-up strategies developed by different line ministries). Development partners and other child-focussed stakeholders can contribute by providing technical resources to set up budget and expenditure tracking systems and can also advocate for this type of reporting with Government counterparts. The Government could also consider taking part in more in-depth public finance management (PFM) for ECD activities, such as Public Expenditure Reviews (PERs) and Public Expenditure Tracking Surveys (PETS).

5 **The State Statistics Bureau of Ukraine and line ministries are encouraged to work together to improve data and information systems across sectors relevant to ECD.**

Data on service coverage, quality, and outcomes should be routinely collected, reported clearly, and utilised in decision-making. This data must be sufficiently disaggregated as to allow analysis from different equity lenses and to understand how coverage and quality of services and outcomes might differ across location, socioeconomic groups, gender, disability status, and other factors. The undertaking of a new Multi-Cluster Indicator Survey (MICS) or a Demographic and Health Survey would be highly beneficial for updating the current evidence base on ECD outcomes. It will be important to ensure these continue to happen regularly, most likely with the support of ODA and implementing partners.

6 **The coordination between national and local level governments in the planning, financing, and delivery of ECD services could be strengthened as local governments are delegated more responsibilities.**

The role that local governments play in ECD should be closely considered. Developing strong coordination mechanisms and relationships between national and local levels would help ensure efficient and equitable delivery of key services. Local governments have significant responsibility for some ECD services making them an especially important partner in this scale-up. Within an ECD policy and/or strategy (Recommendation 1), the roles and responsibilities of local level governments should be made clear. National stakeholders should also, at a minimum, play an overseeing and governance role, ensuring that all children and their families have access to core quality services. Initiatives, such as implementing capacity development programming at local levels or providing block grants to poorer or more vulnerable regions, might also be required.

7 **Policy and programme developers are advised to enhance their focus on principles of equity and inclusivity.**

The design of ECD services must be tailored depending on the diverse needs of children, families, and their communities. Particularly vulnerable children, such as internally displaced children or those with disabilities or developmental delays, require specific support and services, and are at risk of being left behind. The same thinking should be applied to caregivers of children, as additional support will be paramount for caregivers who are on the move, particularly from areas significantly affected by the war. All policy makers and programme developers working on ECD issues (e.g., Government, development partners, non-government organizations, etc.) should be encouraged to centre equity and inclusivity frameworks into their design. This will likely require technical expertise and consultation and primary data collection with communities and individuals who are targeted as beneficiaries of services and interventions.

4.2.2 Specific to Early Childhood Education and Care

1 **The Ministry of Education and Science is encouraged to develop an ECEC policy and an accompanying strategy to scale-up quality services.**

It is recommended that this policy outline the entitlement of children to ECEC services. In other words, the services that they and their parents can expect and are entitled to receive at different ages. This entitlement and the goals set out in the policy and strategy should be guided both by global evidence on the importance of ECEC but also by a realistic assessment of what is possible given the fiscal and operational context in Ukraine. To develop this policy and strategy, a consultative process should be undertaken with a wide range of stakeholders (including relevant line ministries at national level, the Ministry of Finance, local government actors, service providers, development partners, non-governmental organizations, civil society, parents, and communities). The policy and strategy should be carefully costed and aligned with budget cycles and guidelines provided by the Ministry of Finance.

2 **The Ministry of Education and Science should consider expanding alternative ECEC service delivery modalities.**

To achieve a rapid scale-up of quality ECEC services, the Government of Ukraine and its partners are encouraged to investigate the suitability and feasibility of a range of delivery modalities. An assessment of the current landscape of service provision in ECEC could be undertaken, which maps different service providers and programme modalities. These provider and modality types could be studied for their cost and cost-efficiency, effectiveness (effect on child development outcomes), their potential for scale, and the inclusivity of the programme offering. The Ministry could draw on inspiration from peer countries across the region, which have sought to diversify their ECEC systems away from the Soviet model, to inform this research. Evidence from this assessment could be used to inform the design of a strategy to equitably and efficiently scale services.

3 **The Ministry of Education and Science might explore whether innovative or alternative financing mechanisms could be used to support a scale-up of ECEC services.**

Scaling up ECEC services will require financial resources which, given the constrained fiscal context in Ukraine, may be challenging in the short- to medium-term. The Ministry of Education and Science could draw on inspiration from peer countries to pilot innovative financing mechanisms to plug financing gaps. In particular, many ex-Soviet countries have successfully implemented public-private partnership arrangements that have facilitated rapid, cost-efficient scaling up ECEC services. The Government, alongside its partners, could assess whether these alternative financing arrangements would be beneficial to the ECEC sector. Additional financing resources could improve the quality of ECEC, e.g., by increasing staff salaries.

4 **The Ministry of Education and Science is recommended to review quality assurance frameworks for ECEC (including minimum quality standards, processes for licensing, inspections, and monitoring) and indicators to measure services and outcomes.**

Quality of ECEC provision is critical if children and their families are to realise the benefits of these services. The Ministry of Education and Science plays a significant role in overseeing and regulating the sector, including developing and enforcing quality assurance frameworks. The Government and its partners are encouraged to undertake a thorough review of the current quality assurance frameworks and assess their effectiveness and relevance. This is especially important if the Government decides to introduce alternative service delivery or financing modalities into the system. A collective understanding of what 'quality' means across programmes, how it is measured and enforced, and where responsibilities for quality assurance lie will be essential.

5 **The Government of Ukraine is encouraged to improve the inclusivity of ECEC policies and programmes.**

The Ministry of Education and Science could explore options for inclusive ECEC, including: (i) promoting an inclusive ECEC curriculum; (ii) reviewing the system's approach to children with disabilities and moving towards a more inclusive, mainstreamed approach to providing services; (iii) providing improved training and support for ECEC teachers and caregivers to enable them to provide quality inclusive care and education; (iv) increasing access to professionals trained to support children with disabilities and developmental delays (e.g., speech and language therapists, and psychologists); (v) developing specific training and resources for caregivers and teachers on supporting internally displaced children, and; (vi) increasing access to mental health support in ECEC centres (e.g., by employing mental health professionals).

6 **The Ministry of Education and Science is encouraged to continue to adopt a multi-sectoral, holistic approach to ECD.**

ECEC can be an important platform to deliver services supporting the five components of nurturing care: good health, adequate nutrition, responsive caregiving, safety and security, and opportunities for early learning. While ECEC interventions often focus on the latter components (especially opportunities of early learning), the Ministry of Education and Science should consider encouraging the conceptualisation of ECEC centres as sites for all aspects of nurturing care. In particular, the Ministry of Education and Science should work closely with other relevant line ministries (especially the Ministry of Health and Ministry of Social Development) to develop coherent policies and programmes that allow for this kind of approach. Service providers and implementers might be encouraged to provide additional interventions, such as parenting support groups, vaccination drives, nutritious school feeding, and child protection signposting.

4.2.3 Specific to Health and Development

1 **The Government of Ukraine should consider developing a costed plan or strategy which outlines activities required to reach full coverage for maternal, newborn, and child health (MNCH) interventions.**

The Ministry of Health is encouraged to make closing the coverage gap for basic MNCH interventions, including vaccinations and breastfeeding support services, a strategic priority. In line with European standards, all pregnant women, children, and women who have recently delivered should have access to high-quality health and nutrition interventions to ensure they survive and thrive. The Ministry of Health, alongside its partners, is recommended to assess causal factors leading to coverage gaps and seek to design practical and implementable strategies to address them. It will likely be important to prioritise and sequence the scale-up of these interventions (e.g., based on the effectiveness, cost, or equity implications) and to ensure detailed costing exercises are undertaken to inform planning and budgeting.

2 **The Ministry of Health is recommended to work closely with the Ministry of Finance to identify financing strategies to fund these plans and strategies.**

To execute costed plans and strategies, additional financial resources will likely be required. International benchmarks and commitments for spending on the health sector can be used to advocate for increased budgetary allocations. Further, it is recommended that spending on MNCH is prioritised within health budgets.

3 **The Ministry of Health could prioritise the expansion of the Home Visiting Programme as an important platform for delivery of critical interventions in the first 1,000 days of life.**

This programme can be a powerful platform for service delivery, particularly in the context of war, where travelling to a healthcare facility may be difficult. It would be possible to deliver some of the most powerful interventions using this platform, such as immunisations and breastfeeding education. The Home Visiting Programme could also be used to introduce and expand socio-behavioural campaigns and parenting support. It is important these campaigns be grounded in local healthcare systems, and the Home Visiting Programme is a powerful way to achieve this. Using this programme to support families through the war and as they return to Ukraine will also be beneficial. Approaches to expanding the Home Visiting Programme may require additional research, such as feasibility studies, costed implementation plans, and monitoring and evaluation frameworks. The Government of Ukraine must lead this work; however, development partners and other child-focused stakeholders might be drawn upon to support with technical, operational, or financial resources.

4 **The Ministry of Health and its partners are strongly encouraged to scale up access to quality, age-appropriate mental health services.**

This scale-up would be for both mental health treatment and prevention services, and is imperative due to the negative impacts of the ongoing war. Moreover, building a strong mental health system will encourage families to return to Ukraine and will help them readapt when they do.

5 **The Government of Ukraine should investigate ways to strengthen detection, referral, and treatment pathways for children with disabilities and developmental delays.**

Children with disabilities and developmental delays face additional vulnerabilities in Ukraine and are at risk of being left behind. Ministries, departments, and agencies across the Government of Ukraine are encouraged to work in a coordinated and holistic way to strengthen services and supports for children with disabilities and delays, and their families. From a health perspective, this might include revisiting approaches to detection, referral, and treatment pathways and improving access to trained professionals.

4.2.4 Specific to Social Protection and Child Protection

1 **The Ministry of Social Policy, with support from local governments and other line ministries, should consider developing a costed strategy for a holistic approach to social protection and child protection.**

Building on the Better Care programme, the strategy should provide a holistic approach to early childhood interventions by working closely with the Ministry of Education and the Ministry of Health to formulate a range of interventions. Additional services, such as parenting programmes, educational services, and healthcare services, supplemented by cash assistance where needed, will help ensure families are well supported and will reduce the likelihood that children will need institutional care. A costed strategy will help plan for the scale-up while ensuring that key programmes, roles, and responsibilities are highlighted.

2 **The Government of Ukraine should consider expanding and streamlining cash transfer programmes.**

While Ukraine boasts a comprehensive social assistance landscape, it is essential that the coverage of cash transfer programmes is scaled up to cover all children in the target populations. The Ministry of Social Policy, in collaboration with the Ministry of Finance and local governments, should focus on strengthening the targeting mechanisms for existing cash transfer programmes to ensure children in need are not left behind.

The Government should also consider streamlining cash transfer programmes. Currently, Ukraine has a substantial number of cash transfer programmes aimed at different groups of vulnerable children. The Ministry of Social Policy could consider developing a Universal Child Benefit. This would require covering a larger number of children, but cost-efficiencies could be made through this streamlining process, which may also reduce exclusion and inclusion errors. Current changes proposed by the Government focus on changing the amounts provided under the Universal Birth Grant and reintroducing payments for children under three. This particular path may require additional costs and resources to implement than a universal approach, and inclusion/exclusion errors may continue to occur.

3 **The Government of Ukraine must deliver on deinstitutionalisation. The Ministry of Social Policy, Ministry of Education, and Ministry of Health are encouraged to work in collaboration to achieve this, including through the Better Care programme.**

Reducing institutional care will improve child outcomes and lead to significant cost savings which will allow the Ministry of Social Policy to invest in other forms of family-based social protection and child protection.

The Better Care programme can play a significant role in delivery of deinstitutionalisation. This programme provides early childhood interventions that are essential to providing children with the support they need to avoid institutional care. The Ministry of Social Policy, working together with the Ministry of Health and Ministry of Education, are encouraged to scale up Better Care across the whole country and to provide all families with a minimum package of services. Not only will this reduce the likelihood that children will need institutional care, but it will also make it easier to locate families who need additional support and refer them on to the relevant services.

4 **The Government of Ukraine should continue to repurpose the infrastructure from institutional care to scale-up social protection and child protection services.**

Infrastructure that has traditionally been used for institutional care can be repurposed to provide early childhood interventions. This process has already begun and is part of the Better Care programme. It is important that the Government continues to prioritise this change, as it is a cost-effective scaling-up of service delivery while reducing the need to invest in new infrastructure. Moreover, utilising existing infrastructure can help mitigate the impacts of war. Early childhood infrastructure has sustained significant damage; as such, utilising these buildings can help ensure service provision continues. For example, as the Ministry of Social Policy looks to expand parenting programmes across the country, retired baby homes could be used to host these new programmes.

5 **The Ministry of Social Policy should consider expanding early childhood interventions beyond parenting programmes.**

Early childhood interventions are a crucial pillar in ensuring children can remain in family-based care. Additional interventions for children with developmental delays, mental health support, and the social protection and child protection workforce should all be prioritised and expanded. The Better Care programme provides a comprehensive base for expanding this system. While the Ministry of Social Policy should lead in the process, as per Recommendation 1, it will be important for the ministry to work closely with the Ministry of Health and Ministry of Education to establish a comprehensive, holistic approach to ECD interventions.

6 **The Government of Ukraine is recommended to strengthen the wider social protection and child protection systems.**

Effective programming is only possible if the wider social protection and child protection systems are strong. The Ministry of Social Policy, with the support of development partners, should conduct social service workforce mapping to ascertain where gaps remain regarding staffing numbers, training, and resources among other things. Following this, it will be important to scale up the social service workforce and ensure that all members are provided with appropriate training and capacity building. This is particularly important for the Better Care programme and child protection case management, for which social workers must be trained to be able to manage the ongoing and complex impacts of the war.

7 **The Ministry of Social Policy is advised to strengthen data collection with support from development partners and the State Statistics department.**

Data collection is paramount in ensuring the social protection and child protection systems are targeting the right children, having the desired impacts, and can be revised as necessary. The Ministry of Social Policy, in collaboration with development partners and the Ukraine State Statistics department, should ensure sufficiently comprehensive data is collected regarding all ongoing programmes and the process of deinstitutionalisation. This is especially important given the ongoing war, which has negatively impacted data collection.

8 **The Ministry of Social Policy, in collaboration with the Ministry of Health, is encouraged to expand paid parental leave for mothers and fathers.**

It is important that paid maternity leave be scaled up to 180 days (26 weeks), in line with international recommendations for exclusive breastfeeding. An impactful part of this is ensuring women have flexibility and can take their paid leave whenever they choose. This change has already been announced by the MoSP, but it is important that this is approved. Making these changes would ensure that women are able to care for their children, and receive financial compensation, until their children can enter ECEC at the age of six months. Two weeks of paid paternity leave should be introduced in line with legislation passed by the EU in 2022.[518] The benefits of this are significant: as the study details in Section 3.4.3.3, paid leave produces economic gains, improves health and nutrition outcomes for children, and increases the number of women entering the labour market.

The Ministry of Social Policy should commission a feasibility study to establish how to best implement this scale-up.

4.2.5 Specific to Water, Sanitation, and Hygiene

1 **The Government of Ukraine is encouraged to closely assess damage to WASH infrastructure, and prioritise reconstruction and restoration efforts.**

Damage to water services has been significant, and priorities must be identified. It would be helpful to identify short- and long-term priorities for restoration and for improving drinking water infrastructure, ensuring that both war-affected and unaffected areas with existing infrastructure challenges are addressed. Development partners and other child-focused stakeholders could support these efforts, through providing both technical and financial resources.

2 **The Ministry of Infrastructure should consider collaborating closely with other sectors working with young children to improve WASH habits.**

Promotion of healthy habits, especially proper handwashing, is especially important in the early years. It would be greatly beneficial if close partnerships with the Ministry of Education and Science and the Ministry of Health were nurtured to encourage the development of good WASH behaviours. This might include information and socio-behavioural campaigns, as well as the review of minimum quality standards in facilities.

3 **The Government of Ukraine could develop a strategy to support WASH service providers who have been impacted by damage related to the war.**

WASH service providers face significant financial burdens because of increased maintenance costs associated with the ongoing war. The war has led to damage to water and waste management systems, which have led to substantial monetary pressures. The Government of Ukraine, with its partners, should consider working closely with service providers to establish a detailed action plan for alleviating some of these financial burdens and ensuring consistent supply of vital WASH services.

[518] European Parliament (2022). Maternity and Paternity Leave in the EU, accessed: 09 April 2024. https://www.europarl.europa.eu/RegData/etudes/ATAG/2022/698892/EPRS_ATA(2022)698892_EN.pdf

5

Fiscal Space Analysis

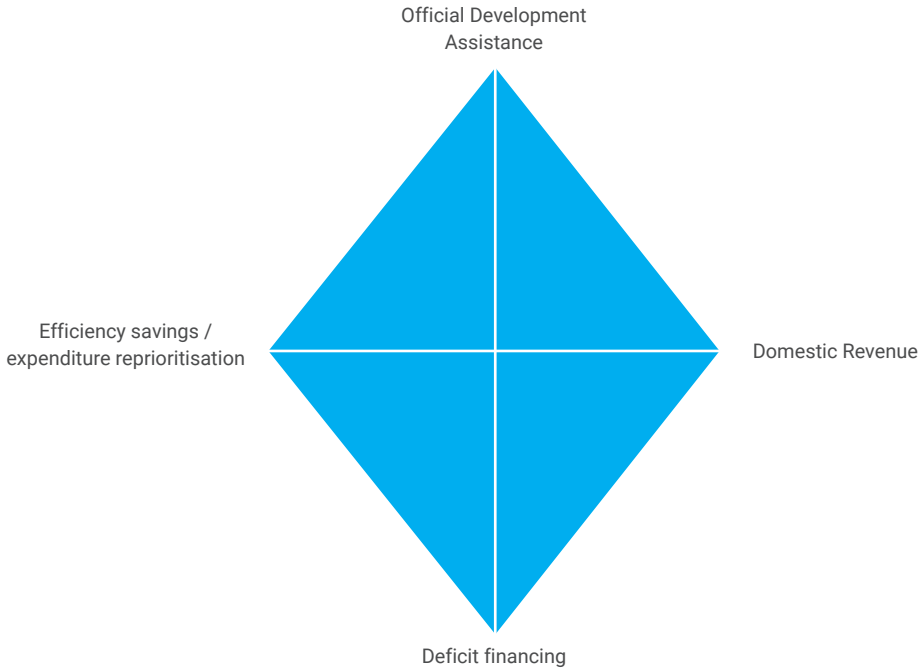
Fiscal space is a multifaceted term that refers to the capacity of governments to raise revenue and allocate resources across competing priorities.[519] In a broader sense, fiscal space encompasses a country's economic structure and growth rate, the government's ability to raise revenues, and the social and political choices reflected in resource allocation.[520] These choices are mediated through complex political processes influenced by various institutional interests competing for limited resources. Fiscal space can also be understood narrowly as the potential to increase allocation to a specific sector (social protection, in this case) or set of linked priorities in the short or medium term.[521] In essence, fiscal space relates to governments' ability to undertake discretionary fiscal policy without jeopardising the macroeconomic sustainability of the economy.

The primary question this analysis aims to answer is: what is the scope for allocating additional resources to the ECD sectors over the medium-term, based on the overall macroeconomic environment and medium-term outlook? This analysis uses data and economic projections to model the availability of financial resources within a government's budget and compares this with the costs of achieving targets for ECD. It is important to note that this analysis has been carried out utilising the costing generated for the Investment Case. This costing was done separately for each sector, rather than for the ECD package of interventions. Therefore, a fiscal space analysis (FSA) explores ways to fund the different sectors that make up ECD, but it does not account for additional costs, or cost savings that would be generated if these interventions were all scaled up as one ECD package.

[519] Roy, R., and Heuty, A. (2009). Fiscal Space: Policy Options for Financing Human Development. Earthscan.
[520] Heller, P.(2005). Understanding Fiscal Space. IMF Policy Discussion Paper, PDP/05/4. https://www.imf.org/external/pubs/ft/pdp/2005/pdp04.pdf
[521] Ibid.

The analysis highlights financing gaps that exist for the sector to reach its goals and provides recommendations around potential financing options to close this financing gap. Fiscal space can be created in a number of ways, including (i) domestic revenue mobilisation, (ii) Overseas Development Assistance, (iii) deficit financing/borrowing, and (iv) efficiency savings and expenditure reprioritisation. However, the feasibility of each financing option ought to be contextualised based on the macroeconomic realities of a country.

Figure 49. Fiscal space diamond



5.1 Methodological Approach

A Financial Programming Framework (FPF) was used to model the macro-fiscal indicators for Ukraine's economy over time. The FPF utilises national data from Government sources and projections from the IMF between 2018-2030. Historical trends were used as a baseline to projections, and the macro-fiscal data covered the last six years, from 2018 to 2023. Data points were taken from the latest available International Monetary Fund - World Economic Outlook 2023 and the IMF Article IV report.[522] For social sector expenditures, state budget data was taken from the State Statistics Service of Ukraine and Ministry of Economy. FSA involved three steps:

- **Available Resources:** An analysis of historic expenditure for social sectors related to ECD programmes was presented, highlighting any gaps in budgets. Using these and other forward-looking expenditure plans for the sector, a projection is provided of the likely budget allocation to social sectors (education, healthcare, WASH, social protection and social security, and economic activities).
- **Estimated Cost:** The needs of the population and national goals which dictate the demands on social spending led to the costing side of the analysis. Due to the lack of a costed plan, cost estimates for the ECD aspirational packages in the cost-benefit analysis aspect of this study were used.
- **Financing Gap:** Comparing costs and resources provided a baseline scenario for financing projections into the future for ECD interventions. This was underpinned by a consistent macroeconomic framework.

The FSA presented financing options for the fast and slow scale-up scenarios. As stipulated above, it relied on the costing from the Investment Case. Therefore, the scenarios mirror those depicted in the Investment Case.

[522] IMF (2023). Article Iv Consultation, Second Review Under The Extended Arrangement Under The Extended Fund Facility, And Requests For Modification Of Performance Criteria And A Waiver Of Nonobservance Of Performance Criterion—Press Release; Staff Report; And Statement By The Executive Director For Ukraine, accessed: 19th August 2024. Available here: https://www.imf.org/en/Publications/CR/Issues/2023/12/11/Ukraine-2023-Article-IV-Consultation-Second-Review-Under-the-Extended-Arrangement-Under-the-542297.

- **Baseline Scenario:** The current rates of coverage for all services in the package are maintained throughout the study time horizon. It is a 'do nothing' status quo scenario against which the benefits and costs of scale-up scenarios can be compared to find the additional, or 'net', benefits and costs.
- **Fast Scale-up Scenario:** Coverage rates for each service are scaled up incrementally from their baseline rate to the target rate by 2030, and then maintained for the remainder of the study period. This scenario was selected to show the outcomes of adopting a very ambitious strategy, and the time horizon runs in line with the SDG targets. The costs of this rapid scale-up were then calculated.
- **Medium Scale-up Scenario:** Coverage rates for each service are scaled up incrementally from their baseline rate to the target rate by 2040, and then maintained for the remainder of the study period. This middle-ground scenario is balanced between the ambitious scale-up of the fast scenario and the slow scale-up scenario. The costs of this medium scale-up scenario were then calculated.
- **Slow Scale-up Scenario:** Coverage rates for each service are scaled-up incrementally from their baseline rate to the target rate at the end of study period in 2050. Costs for this scale-up scenario were then calculated.

5.2 Macro-Fiscal Overview

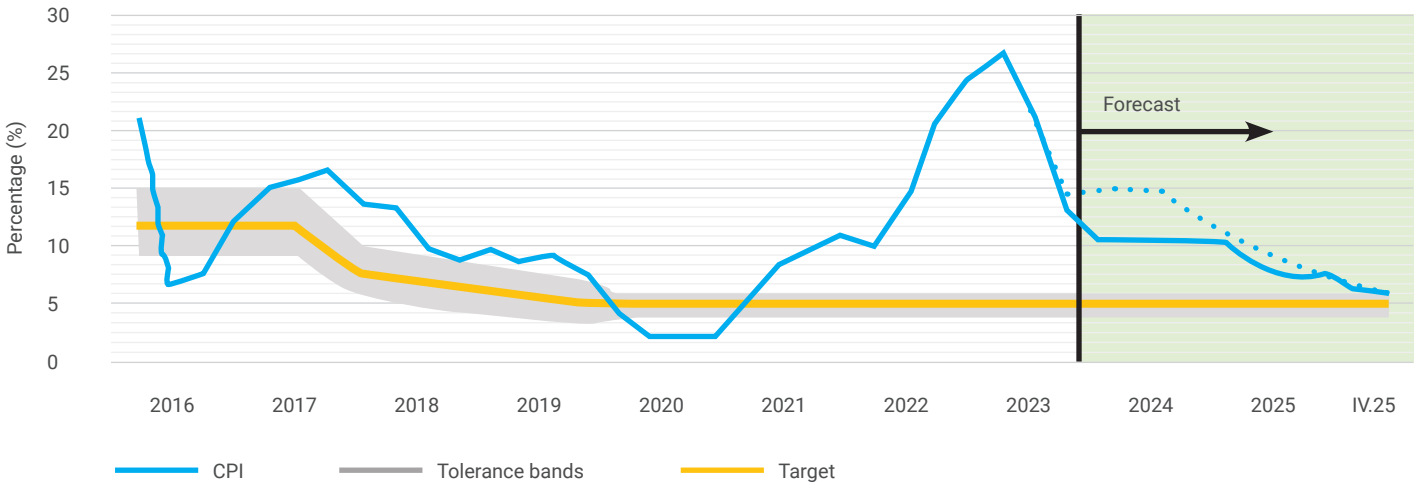
The current macroeconomic environment in Ukraine characterised by negative economic growth, rising poverty levels, and destruction of physical capital because of the ongoing war, which presents enormous development challenges. The country experienced positive economic growth between 2016 and 2019 before contracting in 2020 by 3.8% due to the COVID-19 pandemic.[523] This contraction was exacerbated by the full-scale war in 2022, causing real GDP growth to shrink by 30.3%, double the contraction the country experienced in 2009 following the global financial crisis.[524] This has had far reaching implications on socioeconomic outcomes in the country, with the unemployment rate rising to 24%, its highest in over two decades.[525] Further, over 7.1 million Ukrainians have been pushed into poverty as of 2022, marking a distressing 15-year regression in the country's poverty reduction targets.[526] The following subsections further offer an overview of the Ukrainian economy.

5.2.1 The Real Sector

Inflationary pressures have persisted and stayed consistently above targets and risen dramatically especially from 2021, peaking at 26.6% in the fourth quarter of 2022.[527] There has, however, been a gradual easing of inflation driven largely by the saturation of the food and fuel markets and a decrease in global energy prices. This decline in inflation is predicted to continue and reach a target of 6% by the fourth quarter of 2025.[528] Further, the latest report on economic activity suggests that business expectations declined due to several challenges, including security risks, damaged production facilities, logistical challenges for exporters, increasing fuel prices, and a significant lack of skilled staff. The business activity expectations index (BAEI) decreased from 50.1 in September to 49.6 in October.[529] Overall, businesses expect slower price growth and, therefore, have no major hiring plans with possibility of businesses cutting down hiring across sectors.

[523] IMF (2023). Ukraine at a Glance: Country Data for Ukraine. https://www.imf.org/en/Countries/UKR
[524] Ibid.
[525] Ibid.
[526] World Bank (2023). World Bank Group Support to Ukraine. https://thedocs.worldbank.org/en/doc/1cbfe97313f071d12a1a073cf94992d8-0080012023/original/World-Bank-Group-Support-to-Ukraine.pdf
[527] National Bank of Ukraine (2023). Inflation Report. https://bank.gov.ua/en/news/all/inflyatsiyniy-zvit-lipen-2023-roku
[528] Ibid.
[529] National Bank of Ukraine (2023). Business Activity Expectations Index -October. https://bank.gov.ua/admin_uploads/article/Business_survey_m_2023_10_eng.pdf?v=4

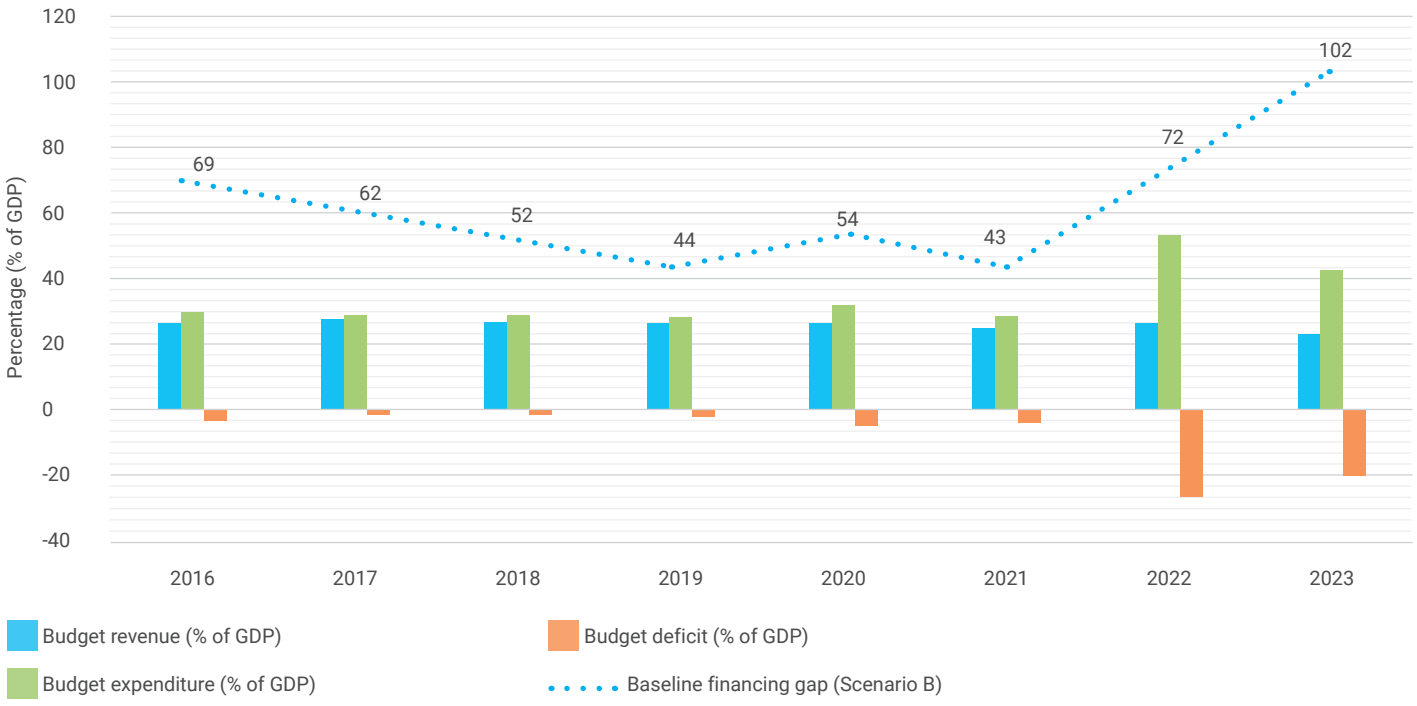
Figure 50. Consumer price index (%, year-on-year)[530]



5.2.2 The Fiscal Sector

Between 2016 and 2022, the national budget displayed an annual growth trend, peaking in 2022 with an 81.5% nominal increase in expenditures largely driven by defence and security needs. Despite this, 2023 projections indicated a nominal decline of 4.6%, but adjustments were anticipated due to enhanced international assistance. The GDP ratio of the national budget expenditures rose to 52.1% in 2022, from 27.3% in 2021, but was slated to decrease to 41.1% in 2023, subject to revisions. Unsurprisingly, defence and security allocations dominated the budget in 2022 at 59%, up from 20% in 2021. Tax receipts plummeted from 58% in 2021 to 31% in 2022, with 2023 projections at 38%. Conversely, reliance on foreign borrowings and international grant aid surged, accounting collectively for 35% of 2022 revenues. These changes arose due to the war's impact on businesses and were further influenced by tax incentives and support programmes. The influx of international aid became a lifeline, with significant contributions from global partners. As a result, Ukraine's public debt swelled, reaching about 72% of GDP in 2022 and was projected to reach 102% by the end of 2023.

Figure 51. Trends in some key fiscal indicators in Ukraine[531]



[530] National Bank of Ukraine (2023). Inflation Report. https://bank.gov.ua/en/news/all/inflyatsiyniy-zvit-lipen-2023-roku
[531] UNICEF (2023). Budget Brief: State Budget of Ukraine Analysis in 2021-2023 Years.

5.2.3 The External Sector

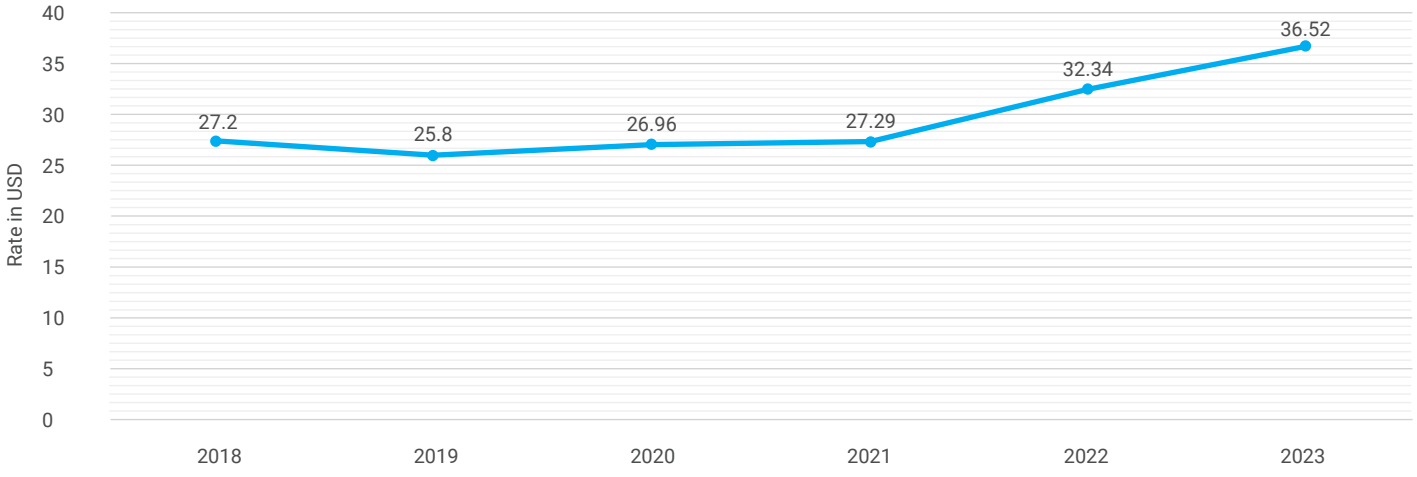
From the period between 2010-2022, Ukraine has consistently registered a trade deficit, however, this deficit increased markedly from -1% in 2021 to -17% in 2022,[532] largely due to supply chain breakdowns caused by the war, limiting exportation of key products, such as grain. As of August 2023, the growth of the goods trade deficit has slowed due to increased supplies from a new harvest, despite the halt of «grain corridor» operations. Internationally, while aid from the EU decreased, Ukraine's reserves remained above USD 40 billion, with future grants expected to sustain this level.[533]

Figure 52. Ukraine's exports and imports, as a share of GDP between 2010 - 2022[534]

5.2.4 Monetary Sector

The Ukrainian financial sector has displayed resilience amidst wartime adversities. The economy is poised for moderate growth this year, with the IMF promising significant aid of USD 115 billion over the next four years.[535] The National Bank of Ukraine (NBU) has accumulated its highest international reserves in over a decade. The corporate loan portfolio

Figure 53. Exchange Rates



[532] World Development Indicators (n.d.,). World Bank Data on Ukraine for Exports and Imports (% of GDP). https://databank.worldbank.org/source/world-development-indicators#advancedDownloadOptions

[533] National Bank of Ukraine (2023). Monthly Macroeconomic and Monetary Review - October. https://bank.gov.ua/admin_uploads/article/MMR_2023-10_en.pdf?v=4

[534] Ibid.

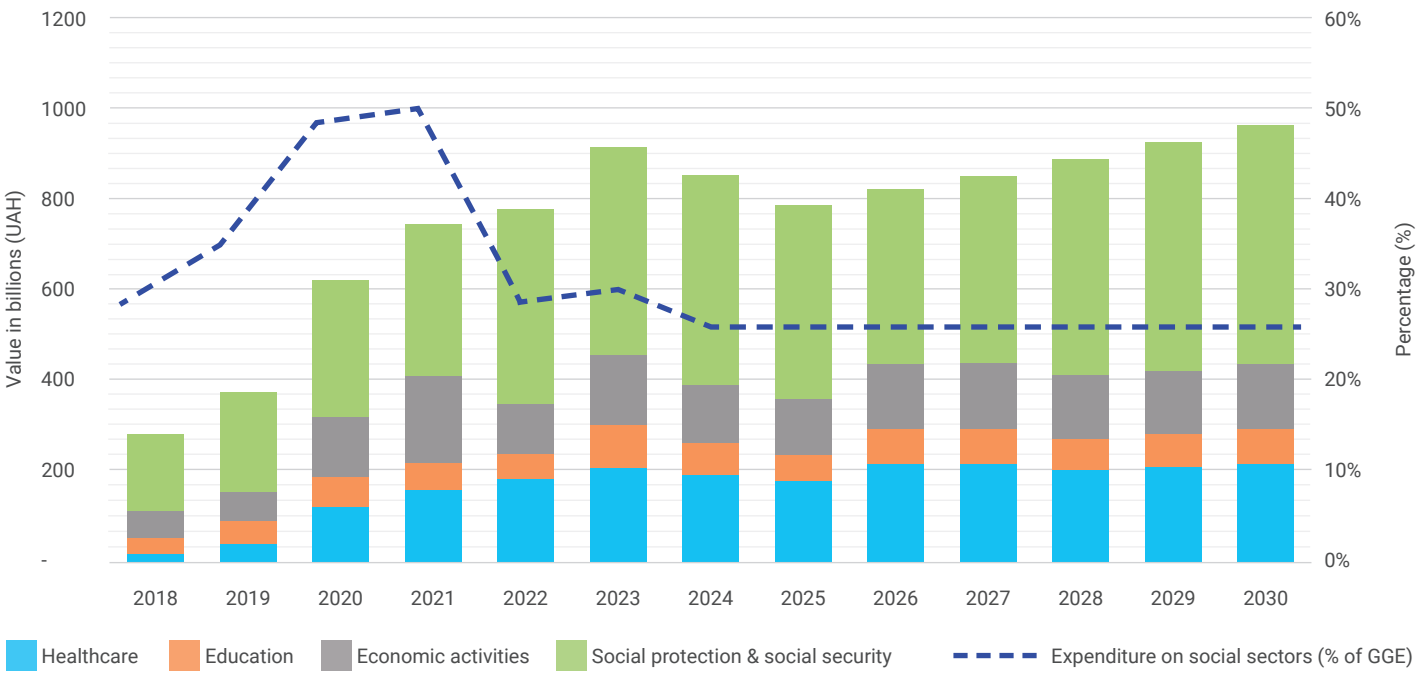
[535] National Bank of Ukraine (2023). Financial Stability Report. https://bank.gov.ua/admin_uploads/article/FSR_2023-H1_eng.pdf?v=4

is experiencing a contraction, but there's optimism for a 10% growth in the hryvnia loan portfolio this year.[536] Banks realised profits in 2022 and saw an increase in 2023, with capital adequacy now at double the minimum requirement. Additionally, banks have recognised losses on nearly 15% of their pre-war portfolios, with estimates suggesting this could approach 20% due to the war.[537]

5.3 Available Resources

Trends in social spending in Ukraine between 2018–2023 were projected to the medium-term (Figure 54). The projections undertaken here are conservative, with the main assumption being that current volumes of social spending (education, healthcare, WASH, social protection and social security and economic activities) will be maintained in the short to medium term (2024 – 2030). The historical expenditures are obtained from the most recent data from the State Statistics Service of Ukraine, the Ministry of Economy, and UNICEF's National Budget Brief.[538] The data suggests that social spending between 2018 and 2023 averaged around 37% of general government expenditure (GGE). Spending in this sector increased from about UAH 290 billion in 2018 to UAH 923 billion in 2023, and is projected to reach about UAH 978 billion by 2030, if the current spending as a share of the national budget is maintained. The data suggests that social protection and social security constitutes the largest share of social spending. Additionally, capital expenditures constitute and are estimated to continue to dominate the bulk share of social protection spending, averaging 91% of all social protection spending between 2018 - 2030 while peaking at 15% of social spending in 2023. This is followed by healthcare (7%), economic activities (5%), education (3%), and WASH (0.2%) in the same year. Since the escalation of the war in 2022, defence spending has received priority in the state budget, nearly tripling from 20% of state budget in 2021 to 59% of state budget in 2022, with a slight decline to 51% in the 2024 state budget.[539]

Figure 54. Trends in Social Sector Spending



[536] Ibid.
[537] Ibid.
[538] UNICEF (2024). Ukraine's State Budget 2024, accessed: 10 April 2024. https://www.unicef.org/ukraine/media/38981/file/National%20Budget%202024.pdf
[539] UNICEF (2023). Budget Brief: State Budget Of Ukraine Analysis In 2021-2023 Years.

5.4 Costing: Resource Needs

Assessing resource needs in Ukraine to finance the different ECD sectors is a crucial first step in determining the financing gap that currently exists. In the absence of a costed social sector plan, a high-level costing exercise was carried out for the Investment Case, as detailed above.[540] Costs were calculated for four packages of interventions covering ECEC, health and nutrition, social protection and child protection, and WASH. Each package was costed separately. The total costs calculated during this exercise provide a basis for understanding what the costs of achieving the aspirational package are and what the financing gap looks like.

The FSA then explores sustainable ways of financing the additional costs required to scale-up the fast and slow scenarios. However, in line with available macro-fiscal projections, these projections stop in the year 2030. This ensures that the FSA relies on a consistent macroeconomic framework and does not depend on assumptions that may be difficult to accurately predict. This allows the FSA to illustrate pragmatic solutions to scaling-up funding for ECD interventions.

Table 41. Cost Estimates for Scaling Up ECD Interventions under the Fast and Slow Scenarios, in UAH Billion, Undiscounted

Cost Estimates	2023	2024	2025	2026	2027	2028	2029	2030
Baseline	105.0	116.8	126.2	132.2	135.2	136.8	138.7	140.8
Costs – Fast	105.0	119.5	131.7	140.4	146.3	151.0	156.2	162.4
Costs – Medium	105.0	118.1	128.8	136.0	140.3	143.3	146.7	150.7
Costs – Slow	105.0	117.8	128.0	134.9	138.7	141.3	144.1	147.5

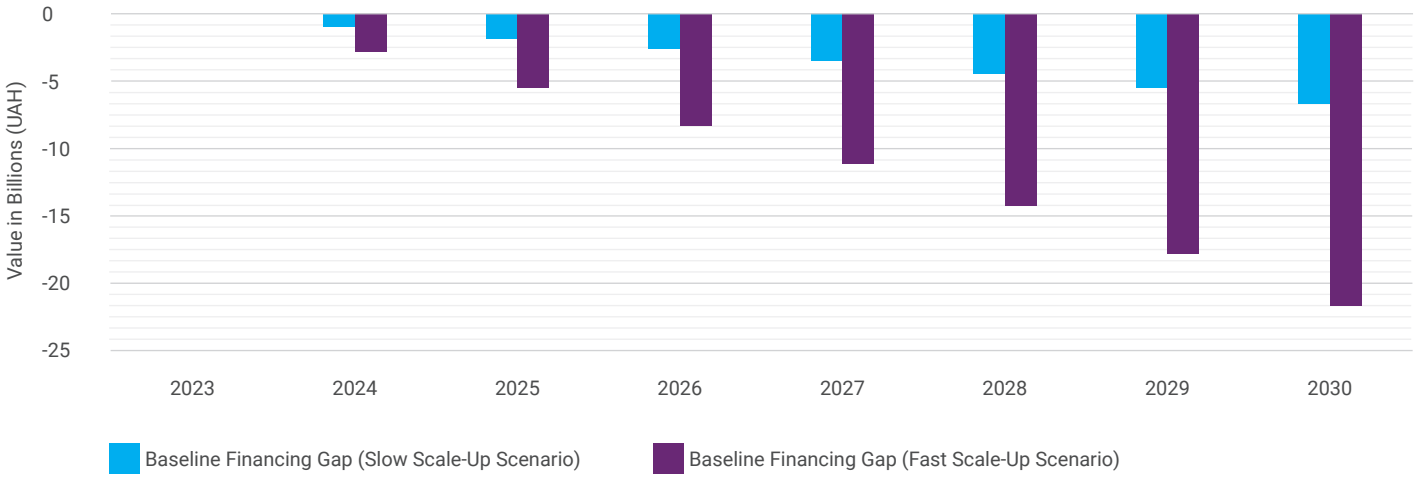
5.5 Analysis of Fiscal Space

5.5.1 Business as Usual Scenario

The business-as-usual scenario represents the current macroeconomic situation and policy stance. It is essentially a projection of what would happen if the current trend in social spending continues, and no significant policy changes are made (business-as-usual scenario). It constitutes the projections of available resources and resource needs for the ECD intervention packages. This provides a reference point against which alternative scenarios can be compared. After the baseline scenario, different financing options are considered and discussed in the next section.

Under the business-as-usual scenario, the financing gap for scaling up the ECD interventions modelled is projected to increase from an estimated UAH 2.8 billion in 2024 to UAH 21.6 billion in 2030 under the fast scale-up, and from UAH 0.98 billion in 2024 to UAH 6.7 billion by 2030 under the slow scale-up scenario.[541]

Figure 55. Projected Financing Gap for the Social Sectors, in UAH Billions



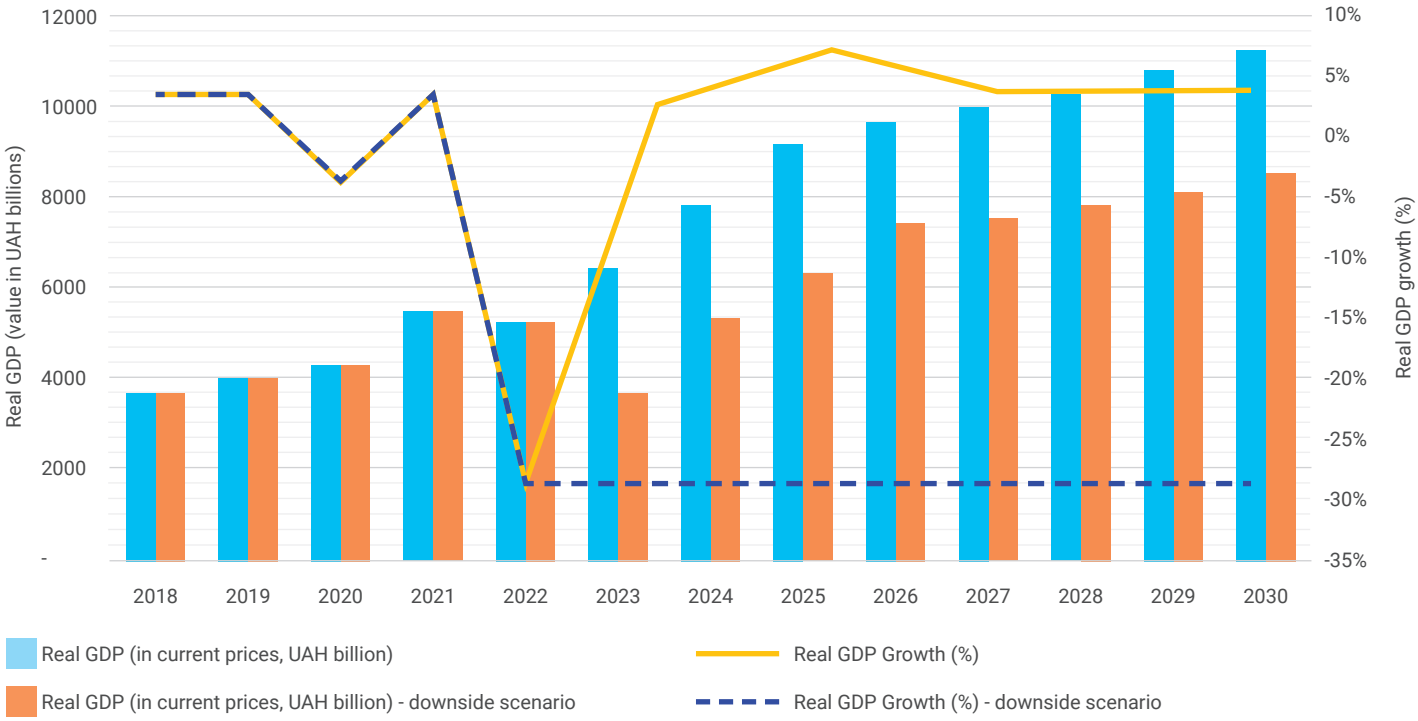
[540] As specified in the introduction, please note that this costing is the total sum of each sector of ECD, which were costed separately for the Investment Case. This is different to a costing of the ECD sector as one package.

[541] The slow scale-up scenario involves increasing coverage of ECD interventions to 100% by 2030, whereas scenario B scales up to 100% coverage by 2050.

5.5.2 Economic Downside Scenario

Given the context of war in which the country currently operates, it is important to account for economic uncertainties in the model. This accounting offers insights on what resource mobilisation efforts for financing ECD interventions would amount to and the feasibility of these policy options in an economic downside scenario. The downturn scenario refers to a situation where Ukraine's economic outlook ends up being worse than originally predicted. To determine this downturn scenario, a 29% negative shock to economic output (GDP) was included, and key macroeconomic indicators were projected into the medium term (until 2030), given this shock. The 29% negative shock is in line with evidence that suggests that over a one-year period following the escalation of the war, the country lost about 29% of its GDP - representing a worst-case scenario since the start of the full-scale war.

Figure 56. Real GDP (Current Prices, in UAH Billions) and Real Growth (%) under Baseline and Downside Scenarios



5.6 Financing Options

This section elaborates on the analysis of the four financing options modelled in the fiscal space diamond, i.e., domestic revenue mobilisation (DRM), ODA, deficit financing (debt relief and restructuring), and efficiency savings. It highlights the key considerations and assumptions made and presents the findings on the potential fiscal space these policy options could create to reduce the financing gap for the aspirational packages to scale up ECD interventions in the medium-term (2024-2030).

5.6.1 Domestic Revenue Mobilisation and Allocation

Domestic revenue mobilisation (DRM) is the most sustainable way of creating fiscal space for financing the national budget. This often involves strategies that spell out clear revenue collection targets in line with broader national development goals. Such strategies further outline precise, and yet comprehensive, reforms, such as Public Financial Management (PFM) and tax reforms, aimed at broadening the tax base, strengthening tax compliance and administration, digitising processes, and improving institutional capacity, among others. For this analysis, the regional revenue averages from the EU region of 41.2% were used as a benchmark for revenue targets in the absence of clear quantitative revenue targets in the country's 2024-2030 domestic revenue mobilisation strategy document.[542] This benchmark would not be

[542] Ministry of Finance (2024). National Revenue Strategy. https://mof.gov.ua/storage/files/National%20Revenue%20Strategy_2030_.pdf

feasible by 2030, even if all tax reforms were implemented. It is therefore assumed that the tax-GDP ratio grows at the same pace as GDP growth in the medium-term under an economic recovery scenario. Ukraine's tax revenue as a share of GDP averaged 21.8% in 2023. This is then projected to grow at the same pace as projected economic growth in line with the IMF Article IV projections and to reach about 30% by 2030.

To achieve this revenue target amidst considerable risks and uncertainty, robust policy action is imperative. Key measures to achieve this will include restoring pre-war taxation regimes to bolster revenue, with a focus on reversing tax eroding measures, such as exemptions and deferrals introduced during Martial Law, and enhancing tax compliance, while ensuring new tax measures are targeted and time bound. Reports indicate that the country's simplified taxation system, while initially aimed at easing compliance burdens, has resulted in tax leakages and inconsistencies, necessitating reforms to prevent tax evasion and ensure fairness in the tax system. Addressing these challenges is vital for ensuring fiscal stability and sustainable economic growth to create budgetary room for social spending including ECD interventions.

Box 33. Some Medium to Long-Term Revenue Raising Strategies

The National Revenue Strategy (2024-2030) outlines a number of priorities, including:[543] a simplified taxation reform that ensures the system is used by micro and small businesses as intended, while transitioning medium and large businesses to the standard CIT rate over time; Personal Income Tax (PIT) changes, including reintroducing progressive tax rates to add fairness to the system; adjusting corporate incentives to prevent tax base erosion, ensuring compliance with global minimum tax rules (Pillar 2) and shifting from reduced tax rates to instant depreciation models; and, boosting tax administration through improving tax collection efficiency and reducing the informal economy. The following are some specific tax reforms aimed at enhancing domestic revenues, as envisioned in the National Revenue Strategy – 2030:

- Enhancing tax administration: The strategy outlines a number of reforms aimed at improving tax administration and subsequently achieving its overall objectives. These include:

  a) Increasing the level of compliance with tax legislation: Implementing a tax risk management system (compliance risks) based on the Concept of the Risk Management System; embracing innovative approaches and technologies for transfer pricing analysis to ensure compliance with international standards for transfer pricing and information security.

  b) Digitisation and data: IT consolidation of information resources within the state finance management system, specifically the State Fiscal Service (DPS). This involves centralising administration at the Ministry of Finance level. An independent IT institution oversees these resources. Key measures include implementing standards for information security, ensuring secure data use and access to taxpayer funds, and developing policies for handling personalised and depersonalised taxpayer information. Additionally, ensuring a secure loop is created within the unified information system, allowing for processing depersonalised taxpayer data. Integration with European VAT systems, VAT refunds, and monitoring excise goods movement is also prioritised

  c) Organizational and personnel measures of the DPS: To be done through several ways, including, but not limited to, a functional survey, which will be conducted for both the DPS and its territorial bodies. Based on the survey results, adjustments to the organizational structure and staffing lists will be approved, aiming to optimise staffing levels, improve the processes of managing the effectiveness of DPS personnel, and provide guarantees of the independence of the authorised units for the prevention and detection of corruption.

- Tax policy: The strategy outlines a number of direct and indirect tax policy reforms. This includes reforms to the simplified taxation system by narrowing the scope of its application by excluding legal entities, introducing safeguards to reduce abuses; raising the VAT registration threshold and increasing the effective tax rates to the level of the general regime; revising/rationalising the current regimes of investment incentives within the limits of the corporate income tax (referred to as P&P); bringing the P&P rules into compliance with EU legislation; and more. On the indirect tax side, reforms include bringing VAT into line with EU legislation, while cancelling reduced rates and benefits that are not provided for by the EU directive on VAT; and, increasing excise duties on fuel, alcoholic beverages, and tobacco products to EU minimum rates.

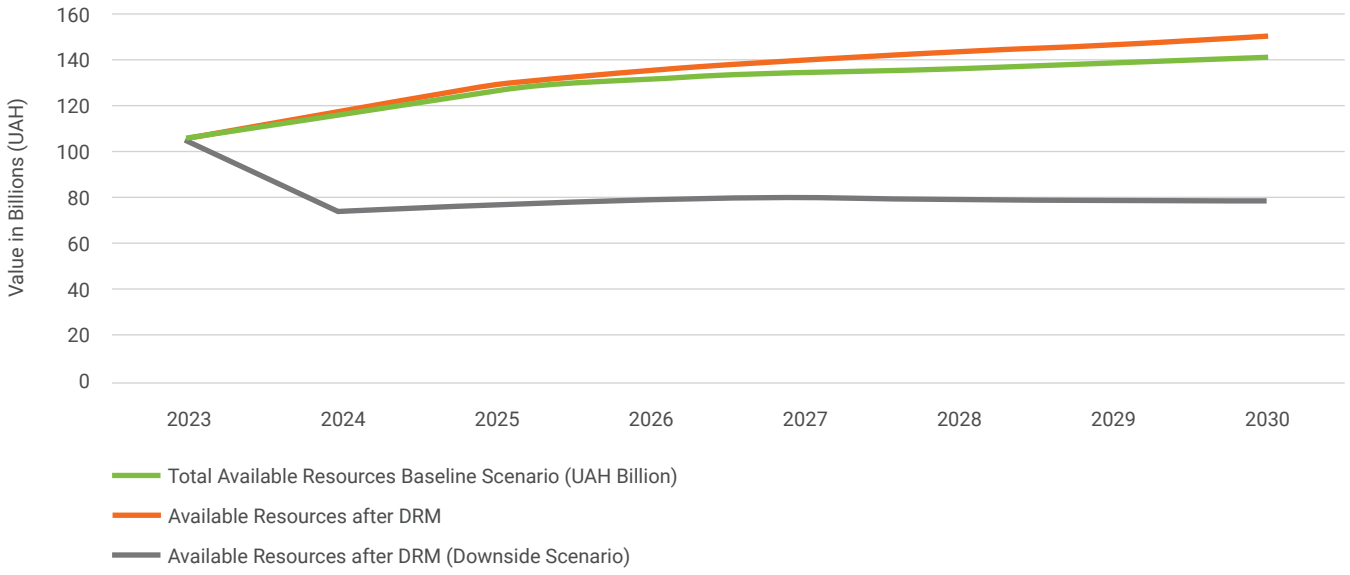
[543] Ibid.

Other notable reforms highlighted in the strategy relate to customs administration and policy. They emphasise the need to strengthen anti-corruption measures and increase trust in customs authorities; develop the institutional capacity of customs authorities to support and cooperate with business; develop international customs cooperation; Harmonise customs legislation of Ukraine to EU legislation; and develop the law enforcement function of customs bodies, among others.

If these reforms are implemented, this would generate additional revenue that can be channelled towards ECD interventions. For example, these reforms would create additional government revenue of about UAH 5 billion annually, between 2023 and 2030, for ECD interventions. This is based on the assumptions that (i) VAT-related reforms are undertaken as per the national revenue strategy and generate 0.6% of GDP in additional revenue annually until 2030, (ii) excise duty, corporate profits, and environmental taxation and resource payment reforms are undertaken and generate between 0.6% - 4% of GDP in revenue annually, and (iii) various tax administration, compliance, and customs reforms are undertaken and all together facilitate tax revenue (tax-GDP ratios) to increase from the current 21.8% to about 30.1% by 2030. This would increase the budgetary room for spending on the social sectors from the baseline of UAH 105 billion in 2023 to about UAH 150 billion by 2030 (or by UAH 45 billion). Under an economic downside scenario, this additional budgetary room from DRM would be eroded by up to 47% by 2030.

On average, this would reduce the financing gap for ECD interventions by about UAH 5 billion, year on year, between 2023 and 2030, assuming about 26% of the additional revenues generated are allocated to the social sectors. Up to 3.5% is allocated to ECD interventions in line with the current prioritisation of the sub-sector.

Figure 57. Potential Tax Revenues and Reallocation for ECD Interventions, in UAH Billions

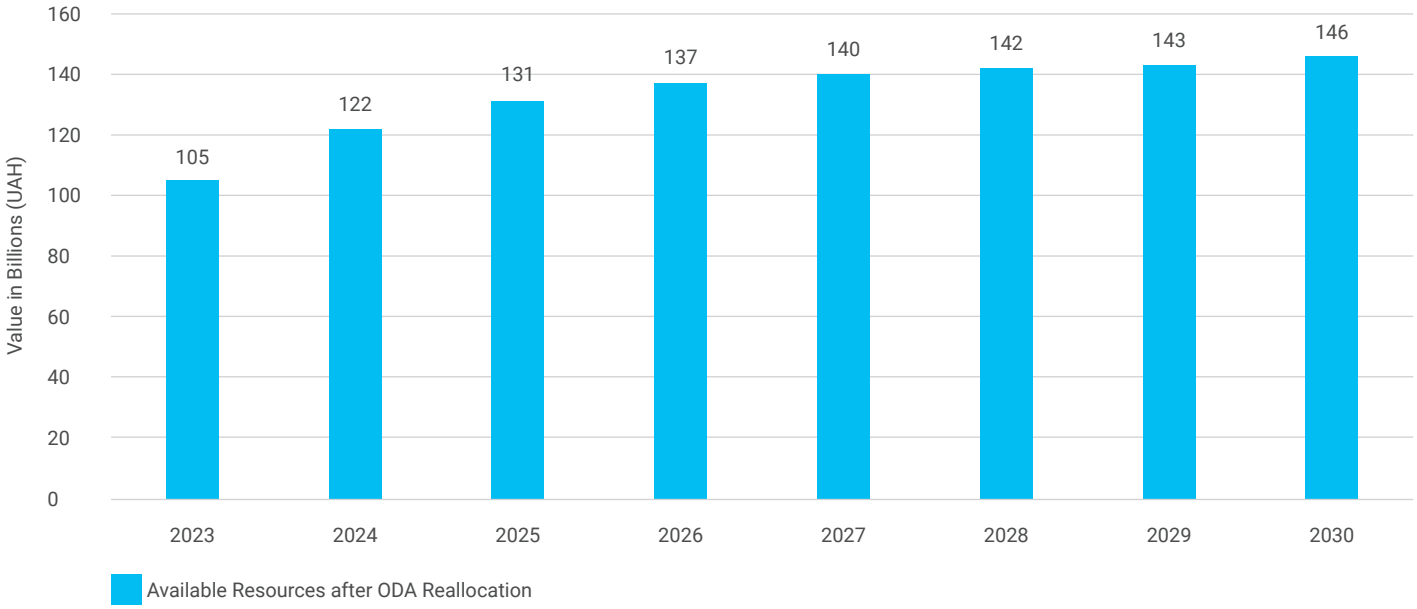


5.6.2 Overseas Development Assistance (ODA)

OECD data indicates that ODA to Ukraine in 2023 amounted to USD 20 billion, a significant increase from the USD 918 million in 2021. Humanitarian aid accounts for USD 1.8 billion of this total.[544] ODA inflow is expected to continue as a result of the ongoing war, yet the IMF estimates that on-budget support in the form of grants will decline overtime, from 6.7% of GDP in 2023 to 0.7% of GDP by 2030. It is, however, unlikely that the funds generated from ODA would all be spent on social sectors given the competing priorities (especially reconstruction of war-damaged physical infrastructure worth USD 135 billion). It is, therefore, assumed that only 26% of this would be allocated to social sectors, in line with current prioritisation in the state budget (excluding defence spending). Based on these assumptions, ODA would create an additional budgetary room of about UAH 138 billion, annually, between 2024 and 2030 for the social sectors. This would close the financing gap for ECD interventions by about UAH 4.8 billion annually between 2023 and 2030.

[544] OECD (2023). Foreign Aid Surges Due to Spending on Refugees and Aid for Ukraine. https://www.oecd.org/newsroom/foreign-aid-surges-due-to-spending-on-refugees-and-aid-for-ukraine.htm

Figure 58. Potential ODA for Social Spending, in UAH Billions



5.6.3 Debt Relief and Restructuring

In the current fiscally constrained environment characterised by vast uncertainties, deficit financing offers a pathway for creating fiscal space. However, Ukraine's public debt already presents enormous fiscal distress, given its already high debt to GDP ratio of about 97.3% as of 2023, and is estimated to peak at 100.7% of GDP in 2025, under the baseline scenario, and 135.8% of GDP in 2027, under the downside scenario.[545] Moreover, gross financing needs would remain very high in both scenarios. This raises significant fiscal sustainability concerns given the high debt servicing burdens of 13% of the 2024 state budget (UAH 419.9 billion), a 58.3% increase from the previous budget, amidst fiscal constraints, competing priorities, and economic uncertainties presented by the ongoing war. Based on this context, caution should be taken to minimise further borrowing – domestic or international – for social spending which would increase unsustainable debt levels.

Box 34. Some Debt Relief / Restructuring Initiatives for Ukraine

- **IMF Support Package:** The International Monetary Fund (IMF) Board approved a 48-month extended arrangement under the Extended Fund Facility of about USD 15.6 billion, which is part of a USD 115 billion total support package for Ukraine.[546]
- **Debt Relief and Restructuring:** This broader IMF package includes debt relief and restructuring estimated at USD 15.3 billion for the programme's duration.[547] However, the total need for Ukraine's full reconstruction and recovery is estimated at USD 411 billion.
- **Debt Sustainability Measures:** The Group of Creditors for Ukraine (GCU) committed to a two-step process involving an extension throughout the programme period of the current debt standstill on official sector debt, which was set to expire at the end of December 2023, followed by a final debt restructuring.[548]

[545] State Statistics of Ukraine (2023). State budget data from the State Statistics Service of Ukraine and Ministry of Economy. And IMF (2023). ARTICLE IV CONSULTATION, SECOND REVIEW UNDER THE EXTENDED ARRANGEMENT UNDER THE EXTENDED FUND FACILITY, AND REQUESTS FOR MODIFICATION OF PERFOMRANCE CRITERIA AND A WAIVER OF NONOBSERVANCE OF PERFORMANCE CRITERION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR UKRAINE, accessed: 19th August 2024. Available here: https://www.imf.org/en/Publications/CR/Issues/2023/12/11/Ukraine-2023-Article-IV-Consultation-Second-Review-Under-the-Extended-Arrangement-Under-the-542297.

[546] IMF (2023). IMF Executive Board Approves US$15.6 Billion under a New Extended Fund Facility (EFF) Arrangement for Ukraine as Part of a US$115 Billion Overall Support Package. https://www.imf.org/en/News/Articles/2023/03/31/pr23101-ukraine-imf-executive-board-approves-usd-billion-new-eff-part-of-overall-support-package#:~:text=March%2031%2C%202023%20The%20IMF,total%20support%20package%20for%20Ukraine

[547] Carnegie Endowment for International Peace (2023). Unpacking Ukraine's New IMF Program. https://carnegieendowment.org/2023/05/05/unpacking-ukraine-s-new-imf-programme-pub-89691#:~:text=,Ukraine%E2%80%99s%20economic%20growth%20is

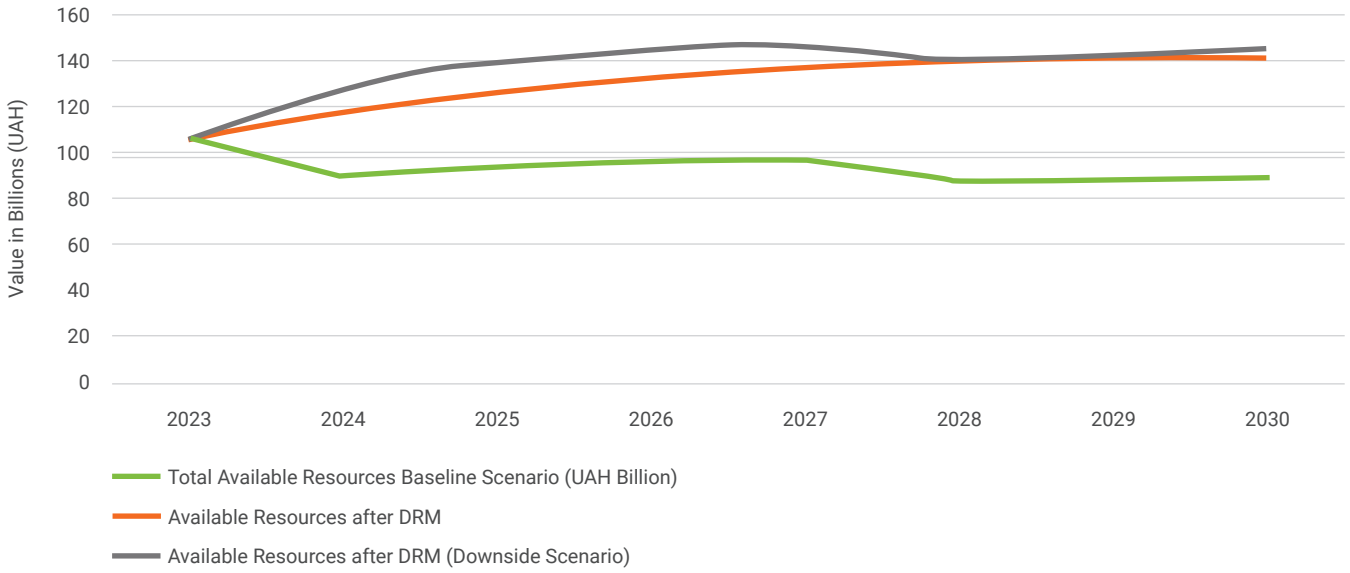
[548] IMF (2023). First Review under the Extended Arrangement under the Extended Fund Facility—Press Release; Staff Report; Staff Statement; and Statement by the Executive Director for Ukraine.

- **Debt Service Suspension:** Ukraine's debt service suspension has been extended until 2027, as part of an agreement with bilateral creditors (like Germany) to provide coordinated debt service suspension.[549]
- **Creditor Agreements:** Ukraine has agreements with bilateral creditors, including the United States, Britain, and Japan, for a two-year freeze on USD 20 billion of overseas debt.[550]
- **Savings from Debt Suspension:** If the debt-service suspension is extended, it would result in a saving of USD 4.4 billion (2.9% of GDP) in 2024 due to international bondholders.[551] There were plans to begin negotiations with commercial creditors in late 2023 or early 2024, with an agreement likely by mid-2024.

While these initiatives provide substantial short-term relief, the long-term sustainability and economic recovery of Ukraine will depend on ongoing support, successful negotiations with creditors, and comprehensive reconstruction efforts. The savings from debt relief and restructuring (in terms of interest payments that would have otherwise been spent on debt servicing) can therefore be repurposed to priority social spending, including on ECD interventions. This would create additional budgetary room of about UAH 35.2 billion, annually, for social sectors between 2023 and 2030. Under a downside scenario, these strategies would deplete the budgetary room by about UAH 9 billion, annually, until 2030.

The results from the discussed initiatives would lead to a reduction of the financing gap for ECD interventions by about UAH 7.5 billion, annually, on average between 2023 and 2030 (while depleting resources of up to UAH 2.6 billion, annually, for ECD interventions under a downside scenario). This outcome assumes reallocation of about 26% of savings from debt relief and restructuring to social spending, of which up to 3.5% would be allocated to ECD interventions in line with the current prioritisation of the sub-sector.

Figure 59. Potential External Support for Social Spending from Debt Relief and Restructuring, in UAH Billions



[549] Federal Ministry of Finance (2023). Debt Service Suspension for Ukraine Extended until 2027. https://www.bundesfinanzministerium.de/Content/EN/Standardartikel/Topics/Europe/War-in-Ukraine/debt-service-suspension-for-ukraine.html#:~:text=Europe%20War%20in%20Ukraine%2027,debt%20service%20suspension%20for%20Ukraine

[550] Reuters (2023). Ukraine's Creditors Agree 2-Year Freeze on $20 Billion Overseas Debt. https://www.reuters.com/markets/europe/ukraines-creditors-agree-two-year-payment-freeze-almost-20-billion-international-2022-08-10/#:~:text=DEBT%20RELIEF%20With%20Ukraine%20facing,had%20also%20backed%20a%20debt

[551] Scope Ratings (2023). Ukraine Set for Foreign Debt Restructuring Next Year, Debt Forgiveness Likely Medium Term. https://scoperatings.com/ratings-and-research/research/EN/173929

5.6.4 Efficiency Savings

Put simply, inefficiency means not making the most of the resources available. Efficiency savings can be boiled down to achieving one of two things: 1) getting better results with the same amount of investment, or 2) achieving the same results with less investment. Enhancing efficiency involves bridging the gap between the current social sector performance and what could be achieved if resources were used more effectively. It is not just about cutting costs but also about getting more value from spending and using funds more efficiently in any sector. The primary focus is on getting value for money, which means controlling or reducing expenses without compromising results or, ideally, achieving better results from interventions with the same investment. Efficiency, therefore, encompasses both the quality and quantity of outputs (e.g., outcomes or services) relative to the input (cost). Another aspect of efficiency involves improving the overall global structure. Development Partners (DPs) can streamline the delivery of their funds and reporting requirements from recipient countries, reducing duplication.

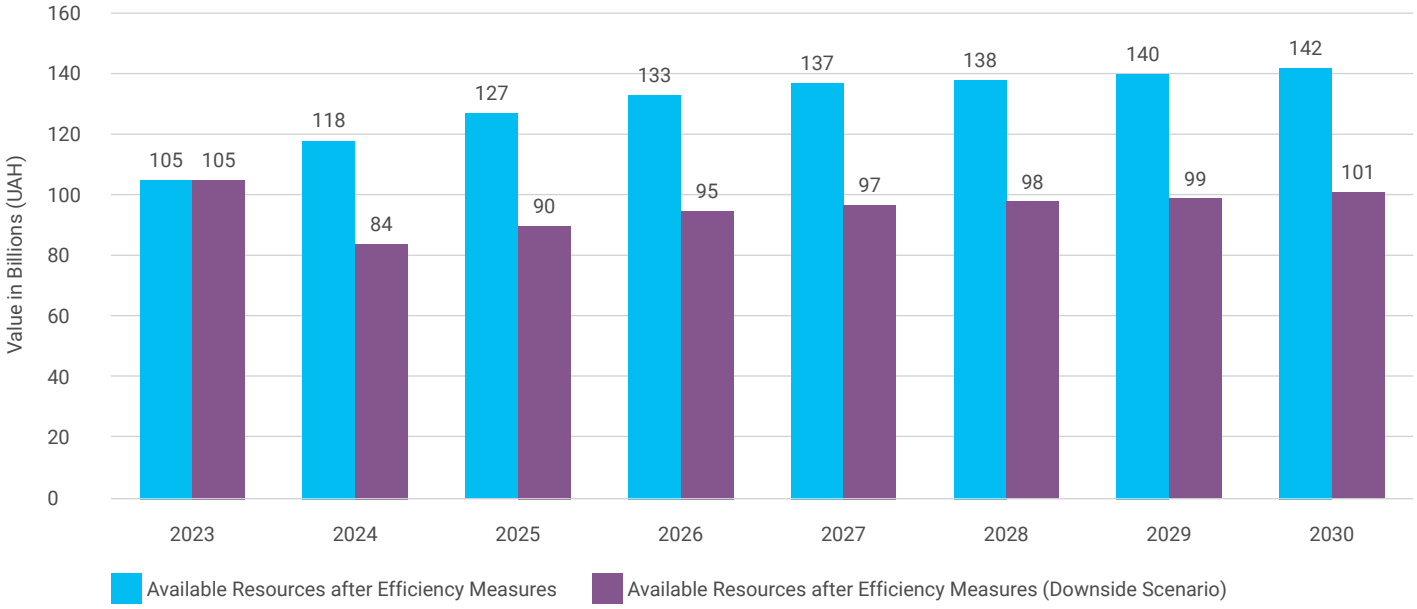
Efficiency input scores were estimated using the Data Envelopment Analysis (DEA) benchmarking methodology. This method involves comparing the performance of countries based on inputs and outputs in the education and health sectors. The scores are specific to Ukraine, calculated based on the country's inputs and outputs. The methodology considers factors such as public spending, private spending, and the educational level of adults for secondary education. The scores provide an indication of the efficiency of the country's education spending relative to the best performers in the sample. The methodology used to estimate inefficiency is based on international comparative performance. Thus, this method measures the performance of a country's health and education systems against the most efficient systems globally. To better understand the kinds of inputs (expenditures) that could be reduced without necessarily reducing outcomes in healthcare and secondary education would require a more in-depth analysis of the expenditure structures and input mix within these sub-sectors, an analysis which is beyond the scope of this study.

- **Education** received an efficiency input score of only 43%. This means that through efficiency improvement, inputs into secondary education could, in theory, be reduced by 57% "without a marked reduction in the output."[552]
- **For health,** an efficiency input score of 46% was found. This means that through efficiency improvement, inputs into health could in theory be reduced by 54% "without a marked reduction in the output"[553]

With much higher output efficiency, Ukraine's focus would be best placed on improving input efficiency. The efficiency scores for outputs were high, at 90 – 92%, leaving scope for between 8-10% improvements in these sectors. Greater efficiency gains are possible on the input side. To calculate the scale of these gains, these input scores are converted into a monetary value, providing a quantitative picture of how much the Government could save if it made the education and health sectors more efficient. The FSA calculates this by making some high-level assumptions based on current spending in the education and health sectors to estimate efficiency savings based on the input efficiency scores. Another key assumption is that Ukraine can move to up to 100% efficiency by 2030. This is an ambitious target, and hence the projections here represent optimal values.

[552] Ibid.
[553] Ibid.

Figure 60. Potential Efficiency Gains for ECD Interventions by Improving Efficiencies in the Health and Primary Education Sectors Alone, in UAH Billions

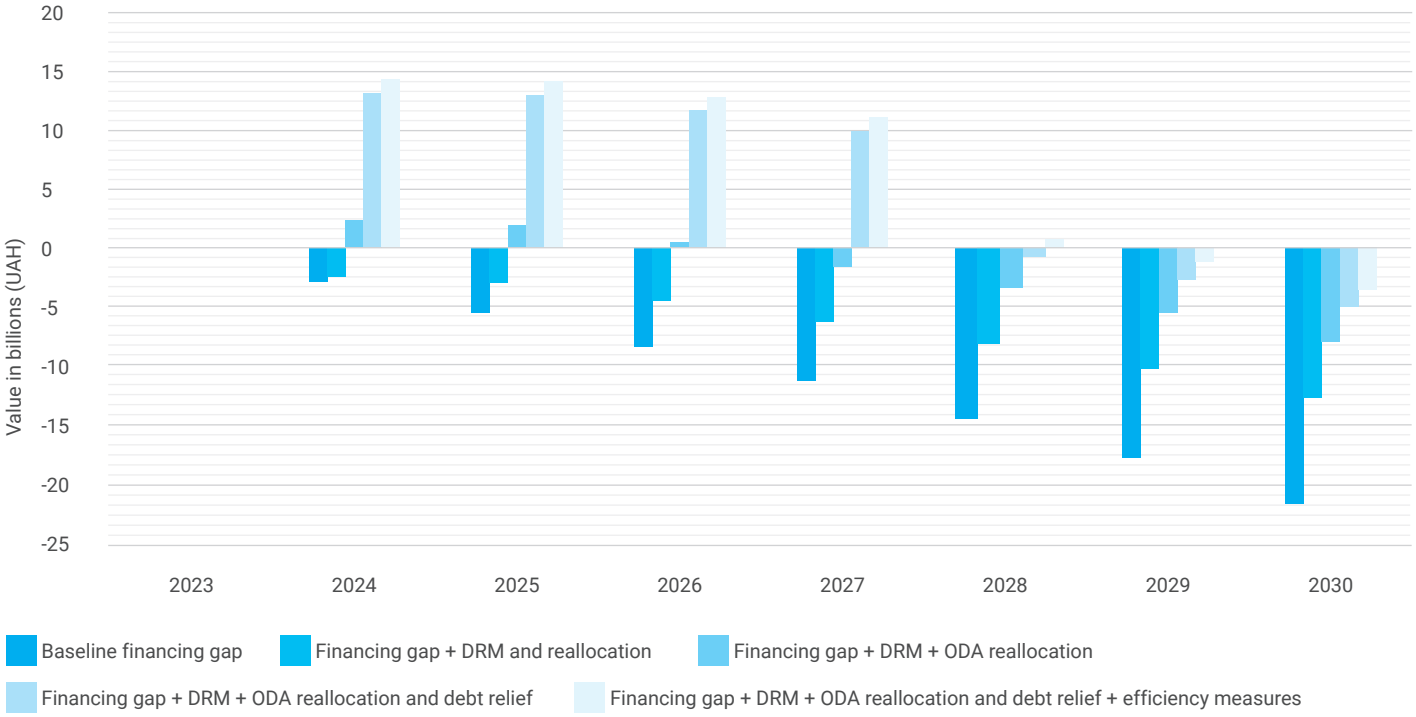


Efficiency input scores were used to estimate the fiscal gains of improving efficiency to 100% by 2030 in the health and secondary education sectors. The efficiency input score refers to the percentage of the current inputs that are needed to maintain the current output level. If the efficiency input score is 43% for education, it means that 43% of the current inputs are effectively used, and the rest (57%) are not contributing to increasing the output significantly. Inputs in this case strictly represent the amount of money spent on each sector, using 2023 figures as the baseline. If efficiency measures were implemented, they would create a budgetary room of approximately UAH 38.4 billion, annually, between 2023 and 2030 for the social sectors. These efficiency measures would reduce the financing gap for ECD interventions by about UAH 1.3 billion, annually, on average between 2023 and 2030 (about UAH 170 million under the downside scenario).

5.6.5 Maximising the Fiscal Space Scenario

Utilising all of the different financing options would eliminate the financing gap for the slow scale-up scenario by 2030 but would still leave a financing gap for the fast scale-up scenario between 2028 and 2030. Calculating the reduction in the financing gap is done by adding together all of the savings made from the different financing options. The financing gap under the fast scenario would be reduced from UAH 21 billion to UAH 3.4 billion, or by 84%. This reduction is under an optimistic scenario where the Government prioritises additional fiscal space to the social sectors (healthcare, education, WASH, social protection and social security, and economic activities). The remaining financing gap could be closed by exploring other financing options not modelled here. These may include exploring innovative financing options, such as climate finance / green bonds, public private partnerships, and more robust efficiency measures across all sectors to minimise leakages and optimise sector performance and outcomes.

Figure 21. Potential fiscal space for youth programmes – Scenario B (Billion UAH)



5.7 Policy Implications and Recommendations

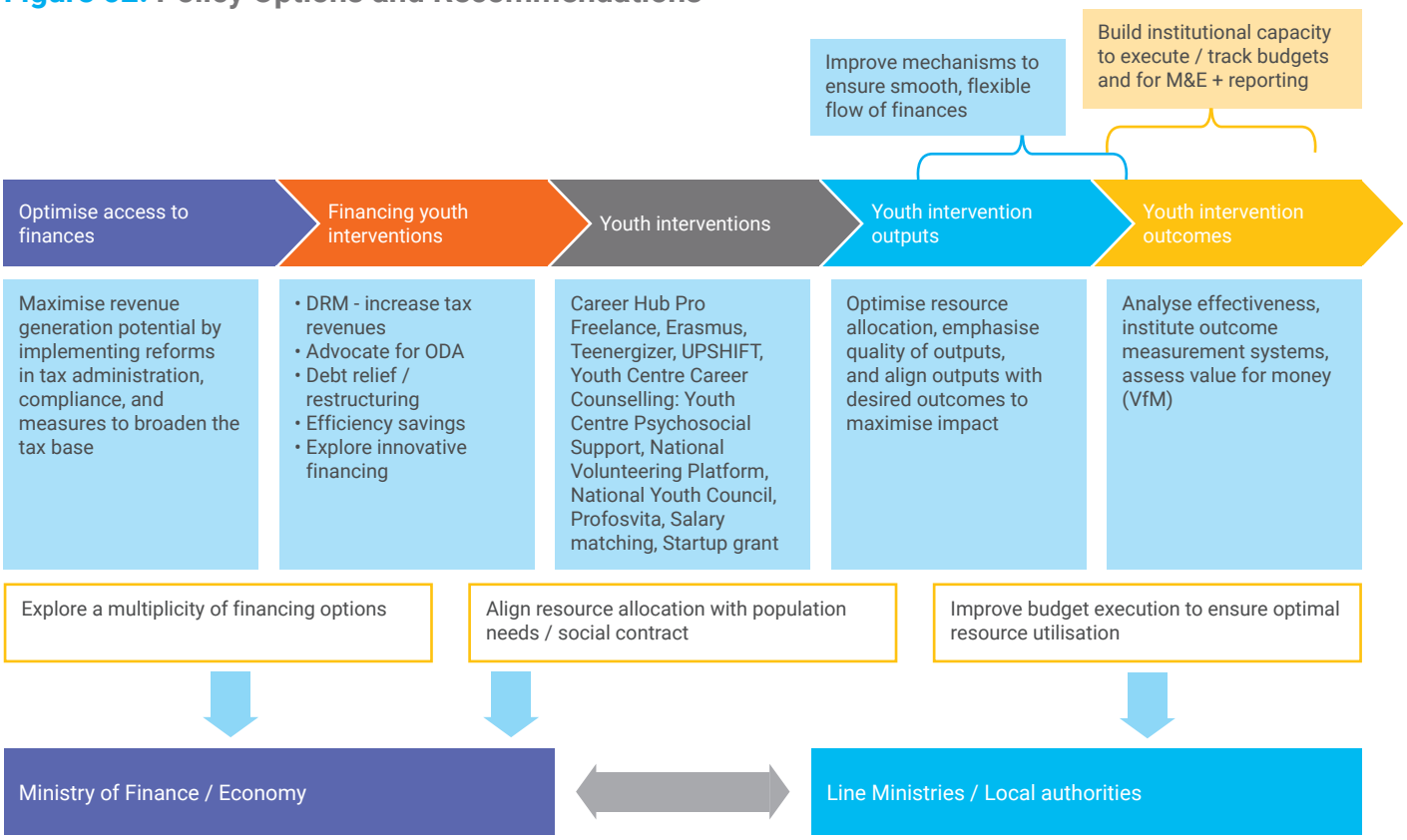
Prioritise negotiations with international partners to secure predictable ODA commitments in the medium-term with clear allocations for social sectors, including ECD programmes. While ODA inflows remain significant, there is a need to align ODA allocations with social sector priorities guided by population needs, including ECD interventions, amidst competing demands. Strengthening partnerships with international donors and ensuring transparent allocation mechanisms can maximise the impact of ODA on ECD interventions.

Optimise domestic revenue mobilisation as the most sustainable source of funding for ECD programmes. To meet fiscal targets amidst considerable risks and uncertainty, robust fiscal policy action is imperative. Optimising access to finances and increasing domestic revenues necessitates prioritising comprehensive tax reforms to increase domestic revenue mobilisation, focusing on broadening the tax base, strengthening tax compliance, and enhancing tax administration. The Government should ensure the reforms are targeted, time-bound, and complemented with effective enforcement mechanisms.

Focus on controlling expenditures and implementing efficiency measures to avoid further debt accumulation. Given the country's high debt burden, caution should be exercised in further borrowing, focusing instead on leveraging debt relief and restructuring initiatives to repurpose savings for social spending. The government should prioritise negotiations with creditors to secure favourable terms for debt relief and restructuring. Savings from debt servicing should be reallocated to priority social sectors, including ECD interventions, to enhance their effectiveness and sustainability.

Explore areas to streamline administrative processes, reduce duplication of services, and improve targeting of resources. Improving efficiency in spending is essential for maximising fiscal space and optimising resource allocation for ECD interventions. The Government should invest in measures to enhance efficiency in the social sectors and as well as in the PFM system, focusing on streamlining processes, minimising leakages, and improving service delivery.

Figure 62. Policy Options and Recommendations



It is important to note that the success of these recommendations depends on strong political will, effective governance, and robust monitoring and evaluation systems. The ongoing war in Ukraine and its economic and social impacts need to be carefully considered when implementing these recommendations. Additionally, continuous dialogue and collaboration among the Government, civil society, and development partners are crucial for designing and implementing effective financing strategies for ECD interventions in Ukraine.

ANNEXES

The Roadmap

The next stage of this project considers what is required to feasibly scale-up the interventions presented. The roadmap aims to provide a framework that can be utilised to support the Government and its partners in scaling up ECD interventions.

The table below provides an overview of the draft framework that is proposed be used to finalise the roadmap. The questions detailed in the 'action' column will be taken forward during further engagements and used to form concrete action points during the final draft of the Investment Case.

Table 43: The Framework for the Roadmap

Action	Process	Timeframe	Responsible entity	Support from partners
Financing				
How can a detailed costing of all interventions be completed? This should also establish necessary resources				
Estimate fiscal space available				
Determine the extent of affordability				
Who will finance the scale-up?				
Prioritisation				
If scaling up all the interventions to 100% is not possible, which interventions should be prioritised?				
What target groups should be prioritised?				
What coverage level should the intervention to scaled up to?				
Law, Policy, and Governance				
How can an ECD strategy be introduced?				
Can governance and coordination mechanisms be strengthened? Both for each sector and across ECD				
Should additional laws and policies be introduced?				
Service Delivery				
What capabilities are needed for the scale-up to be success?				
How can resources and capabilities be obtained?				
How can the efficiency of services be improved?				
Monitoring and Evaluation				
What are the metrics of success?				
How will monitoring and evaluation be done? Should data collection tools and systems be designed?				
Is data collected equitably?				

The Full List of Services for the ECD Package

Table 44. Full List of Services in the ECD Package

#	Service	Baseline	Target	Method of Appraisal		
				Economic Evaluation	Literature Review	Review of Interview Data
Early Childhood Education and Care						
1	**Quality childcare provision** (for children 6 months – 2-years old), (% of children in need of it)[554]	33%[555]	100%			
2	**Quality early childhood education** (ECE) (for 3–5-year-olds), (% of total child population 3–5-year-olds)	91%[556]	100%			
3	**Quality pre-primary education** (for 5–6-year-olds), (% of total child population 5–6-year-olds)	73%[557]	100%			
4	Additional supports for children with disabilities	N/A	N/A			
5	Mental health support in ECEC programmes	N/A	N/A			
Health and Development						
5	Mental health support	N/A	N/A			
6	Antenatal care (at least 4 visits)	99%[558]	100%			
7	Antibiotics for preterm labour	74%[559]	100%			
8	Antiretroviral treatment coverage	56%[560]	100%			
9	Assisted vaginal birth	25%[561]	100%			
10	BCG vaccine (single dose)	74%[562]	100%			
11	Blood transfusion (during labour)	86%[563]	100%			
12	Caesarean section (of those in medical need)	86%[564]	100%			
13	Clean birth environment	81%[565]	100%			
14	Clean cord care	94%[566]	100%			
15	Complementary feeding education	59%[567]	100%			
16	Cotrimoxazole	43%[568]	100%			
17	Diabetes case management (for pregnant women)	16%[569]	100%			
18	DPT vaccine (three doses)	73%[570]	100%			
19	Early initiation of breastfeeding	66%[571]	100%			
20	Exclusive breastfeeding up to 1 month	29%[572]	90%			
21	Exclusive breastfeeding up to 6 months	56%[573]	90%			
22	Folic acid fortification	0%[574]	100%			
23	H. influenzae type B vaccine (three doses)	74%[575]	100%			

[554] The population of children (6 months to two years old) in need of childcare was calculated in line with the methodology used in: Devercelli, A. and Beaton-Day, F. (2020). Better Jobs and Brighter Futures: Investing in Childcare to Build Human Capital, (World Bank Group: Washington D.C., USA). It was assumed that the children in need of childcare would be in line with the female labour force participation rate for women who are mothers. The female labour force participation rate in Ukraine was assumed to be 55% (the World Bank reports a rate of 48%, which was lifted by 7 percentage points in recognition of the common under-estimation of female labour force participation in official statistics).

[555] Ukraine State Statistics (2022). Preschool Education in Ukraine, accessed: 09 April.2024. https://www.ukrstat.gov.ua/

[556] Ibid.

[557] Ibid.

[558] Ukraine Health Handbook (2022). The State of Health of the Female Population in 2022, accessed: 09 April 2024. http://medstat.gov.ua/ukr/MMXXII.html

[559] Calculation based on Ukraine input data from Spectrum's LiST module, 2024.

[560] One Health Tool AIM - Adult and child ART and PMTCT data are as reported by countries to UNAIDS/WHO, including projections to 2020.

[561] Calculation based on Ukraine input data from Spectrum's LiST module, 2024.

[562] Ukraine Health Handbook (2022). The State of Health of the Female Population in 2022, accessed: 09 April 2024. http://medstat.gov.ua/ukr/MMXXII.html

[563] Calculation based on Ukraine input data from Spectrum's LiST module, 2024.

[564] Ibid.

[565] Ibid.

[566] Ibid.

[567] Ibid.

[568] One Health Tool AIM - Adult and child ART and PMTCT data are as reported by countries to UNAIDS/WHO, including projections to 2020.

[569] Calculation based on Ukraine input data from Spectrum's LiST module, 2024.

[570] PHC (2022). Vaccination Coverage, accessed: 09 April 2024. https://phc.org.ua/kontrol-zakhvoryuvan/imunizaciya/okhoplennya-scheplennyami

[571] The World Bank (2012). Multiple Cluster Indicator Survey, Ukraine, accessed: 09 April 2024. Ukraine - Multiple Indicator Cluster Survey 2012 (worldbank.org)

[572] PHC (2021). Report on the State of Health of Children for 2021, accessed: 09 April 2024. http://medstat.gov.ua/ukr/MMXXI.html

[573] Ibid.

[574] Food Fortification Initiative (n.d.). Country Profiles: Ukraine, accessed: 09 April 2024. https://.ffinetwork.org/country-profiles

[575] PHC (2022). Vaccination Coverage, accessed: 09 April 2024. https://phc.org.ua/kontrol-zakhvoryuvan/imunizaciya/okhoplennya-scheplennyami

#	Service	Baseline	Target	Method of Appraisal		
				Economic Evaluation	Literature Review	Review of Interview Data
24	Health facility delivery	99%[576]	100%			
25	HepB vaccine (three doses)	76%[577]	100%			
26	Hypertensive disorder case management (during pregnancy)	21%[578]	100%			
27	Injectable antibiotics for neonatal sepsis	74%[579]	100%			
28	Kangaroo mother care	0%[580]	100%			
29	Maternal sepsis case management	74%[581]	100%			
30	Measles vaccine (single dose)	74%[582]	100%			
31	Micronutrient supplementation in pregnancy	3%[583]	100%			
32	Oral rehydration solution - treatment for diarrhoea	59%[584]	100%			
33	Pneumococcal vaccine (three doses)	0%[585]	100%			
34	Polio vaccine (three doses)	69%[586]	100%			
35	Prevention of mother-to-child transmission of HIV/AIDs	99%[587]	100%			
36	Psychosocial care for perinatal depression	10%[588]	100%			
37	Rotavirus vaccine (two doses)	0%[589]	100%			
38	Safe abortion services	88%[590]	100%			
39	Syphilis detection and treatment (for pregnant women)	24%[591]	100%			
40	Tetanus toxoid (during pregnancy)	0%[592]	100%			
41	Treatment for measles	0%[593]	100%			
42	Treatment for pneumonia	92%[594]	100%			
43	Unmet need for modern contraception	7%[595]	0%			
44	Neonatal Vitamin A supplementation	0%[596]	100%			
45	Vitamin A supplementation	0%[597]	100%			
46	Salt iodisation	10%[598]	100%			

[576] The World Bank (2012). Multiple Cluster Indicator Survey, Ukraine, accessed: 09 April 2024. Ukraine - Multiple Indicator Cluster Survey 2012 (worldbank.org)
[577] WHO/UNICEF (2023). Estimates of National Immunization Coverage, accessed: 09 April 2024. Immunization Analysis and Insights (who.int). Dataset last updated June 2023.
[578] Calculation based on Ukraine input data from Spectrum's LiST module, 2024.
[579] Calculation based on Ukraine input data from Spectrum's LiST module, 2024.
[580] Ibid.
[581] Ibid.
[582] PHC (2022). Vaccination Coverage, accessed: 09 April .2024. https://phc.org.ua/kontrol-zakhvoryuvan/imunizaciya/okhoplennya-scheplennyami
[583] Demographic and Health Surveys (2007). Ukraine, accessed: 09 April 2024. The DHS Program - Ukraine: DHS, 2007 - Final Report (English)
[584] The World Bank (2012). Multiple Cluster Indicator Survey, Ukraine, accessed: 09 April 2024. Ukraine - Multiple Indicator Cluster Survey 2012 (worldbank.org)
[585] WHO/UNICEF (2023). Estimates of National Immunization Coverage, accessed: 09 April 2024. Immunization Analysis and Insights (who.int) Dataset last updated June 2023.
[586] PHC (2022). Vaccination Coverage, accessed: 09 April 2024. https://phc.org.ua/kontrol-zakhvoryuvan/imunizaciya/okhoplennya-scheplennyami
[587] PHC (2022). HIV Infection in Ukraine, accessed: 09 April 2024. https://phc.org.ua/sites/default/files/users/user90/HIV_in_UA_53_2022.pdf
[588] Assumption.
[589] WHO/UNICEF (2023). Estimates of National Immunization Coverage, accessed: 09 April 2024. https://www.who.int/teams/immunization-vaccines-and-biologicals/immunization-analysis-and-insights/global-monitoring/immunization-coverage/who-unicef-estimates-of-national-immunization-coverage Dataset last updated June 2023.
[590] Calculation based on regional input data from Spectrum's LiST module, 2024.
[591] Ibid.
[592] WHO/UNICEF (2019). UNICEF-WHO Low Birthweight Estimates: Levels and Trends 2000-2015, accessed: 09 April 2024. https://www.who.int/publications/i/item/WHO-NMH-NHD-19.21
[593] Calculation based on Ukraine input data from Spectrum's LiST module, 2024.
[594] The World Bank (2012). Multiple Cluster Indicator Survey, Ukraine, accessed: 09 April 2024. Ukraine - Multiple Indicator Cluster Survey 2012 (worldbank.org)
.
[595] World Health Organization (n.d.), Unmet need for family planning rate women aged 15-49, per cent, 2023 (all women), accessed: 09 April 2024. https://microdata.worldbank.org/index.php/catalog/2348/
[596] UNICEF (2023). Vitamin A Supplementation Data, accessed: 09 April .2024. https://data.unicef.org/topic/nutrition/vitamin-a-deficiency/#:~:text=Based%20on%20administrative%20data%20analyzed%20by%20UNICEF%2C%20there,million%20fewer%20children%20receiving%20both%20doses%20in%202020 Dataset last updated July 2020.
[597] Ibid.
[598] Calculation based on Ukraine input data from Spectrum's LiST module, 2024.

#	Service	Baseline	Target	Method of Appraisal		
				Economic Evaluation	Literature Review	Review of Interview Data
47	Screening and early intervention for children with disabilities or developmental delays	N/A	N/A			
Water Sanitation and Hygiene (WASH)						
48	Basic sanitation	98%[599]	100%			
49	Safely managed drinking water	70%[600]	100%			
Social Protection and Child Protection						
50	Universal Child Grant	100%[601]	100%			
51	Grant for children under 6 living in large families	57%[602]	100%			
52	Grant for children with disabilities	20%[603]	100%			
53	Grant for children without parental care	20%[604]	100%			
54	Parental leave[605]	N/A	N/A			
55	Deinstitutionalisation[606]	1%[607]	0%			
56	Parenting programmes	N/A	N/A			

[599] Calculation based on Ukraine input data from Spectrum's LiST module, 2024.
[600] Government of Ukraine (2021). National Report on the Quality of Drinking Water and the State of Drinking Water Supply in Ukraine for 2020 and 2021.
[601] The World Bank (2020). How Should We Design Cash Transfers? Accessed: 09 April 2024. https://blogs.worldbank.org/en/developmenttalk/how-should-we-design-cash-transfer-programs
[602] Ministry of Social Policy (2023). Beneficiaries Receiving Cash Transfer Programs. Data supplied by the Ministry of Social Policy December 2023.
[603] Ibid.
[604] Ibid.
[605] Here, the model projects the impacts of scaling up the value of paid parental leave in line with the highest countries in the EU (180 days). Leave can be taken before and after the birth of the child. EU (2022). Maternity and Paternity Leave in the EU, accessed: 09 April 2024. https://www.europarl.europa.eu/thinktank/en/document/EPRS_ATA(2022)698892
[606] The model projects a reduction in the number of newborns entering institutional care. At the same time, an increase in the value of the foster care grant for these children is modelled to ensure those children can remain in family-based care.
[607] Actual figures were compared with population figures for children under 6 to establish the baseline coverage rates. Partnership for Every Child (2023). Rates of Institutionalisation.