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Prioritizing Children:

THE CASE FOR INVESTMENT IN
EARLY CHILDHOOD DEVELOPMENT

REPUBLIKA SRPSKA



**INVESTMENT CASE
FOR CHILDREN**

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ABBREVIATIONS

| | |
|-------|---|
| BCG | Bacille Calmette-Guerin vaccine |
| BCR | Benefit-Cost Ratio |
| BiH | Bosnia and Herzegovina |
| CBA | Cost-Benefit Analysis |
| CEA | Cost-Effectiveness Analysis |
| CwD | Children with Disabilities |
| DALY | Disability-Adjusted Life Year |
| DHS | Demographic and Health Survey |
| DPT | Diphtheria, Pertussis and Tetanus vaccine |
| ECD | Early Childhood Development |
| ECDI | Early Childhood Development Index |
| ECECC | Early Childhood Education and Care |
| EU | European Union |
| GDP | Gross Domestic Product |
| HDI | Human Development Index |
| IBCR | Incremental Benefit-Cost Ratio |
| ICER | Incremental Cost-Effectiveness Ratio |
| ILO | International Labour Organization |
| LAY | Learning-Adjusted Year |
| LiST | Lives Saved Tool |

| | |
|------|-----------------------------------|
| MICS | Multiple Indicator Cluster Survey |
| NPV | Net Present Value |
| ODA | Official Development Assistance |
| OHT | One Health Tool |
| ORS | Oral Rehydration Solution |
| RS | Republika Srpska |
| SDGs | Sustainable Development Goals |
| VAT | Value-Added Tax |
| YLD | Years of Life with Disability |
| YLL | Years of Life Lost |

EXECUTIVE SUMMARY

Extensive research shows that the early years of a child's life really matter. 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. 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 and graduation rates, decreased social exclusion and multi-dimensional poverty, crime and delinquency rates, and improved long-term income.¹ Importantly, investment in early childhood development (ECD) can drive progress within the Sustainable Development Goals (SDGs) and be central to meet basic child rights enshrined in the Convention on the Rights of the Child (CRC).

In Republika Srpska (RS) the importance of ECD cannot be understated. RS is faced with an ageing and shrinking population, which presents a concerted threat to the entity's economic and social development.² The total population has been declining every year since 2002, and, as of 2021, only 13% of the population of RS is below the age of 15.³ This demographic situation is the result of both low birth rates and high rates of emigration. In 2020, around 56,250 children between 0 and 6 years of age lived in RS, a figure set to decline to around 40,676 by 2050.⁴ They must be the focus of urgent policy and investment attention. ECD is particularly important given this demographic context. With fewer children and limited resources, RS must cultivate a skilled, productive young work force in order to sustain and improve economic and social conditions.

Over the past fifteen years, progress has been made towards a conducive policy environment for the ECD ecosystem. This includes the Framework Law on Preschool Education and Upbringing (2007), the RS Law on Social Protection (2011), the RS Education Strategy 2022-2030, and the RS Early Childhood Development Programme 2022–2028. However, there are clear untapped opportunities to invest in RS's younger generations. The conditions needed for the RS's young children to survive, thrive, and meet their full potential are not in place. Young children in RS are exposed to poverty, deprivation, and toxic stress; health and nutrition outcomes for children are poor, and opportunities for early learning, despite major improvements, are being stifled across RS.

Expenditure in the social sectors (health, education, social protection) have been inadequate to meet needs. Social sector budgets are centralized at RS entity level and are managed by the RS Ministry of Health and Social Welfare, the RS Ministry of Education and Culture, and the RS Public Fund for Child Protection. However, municipal and city financing represent the main funding source of ECEC and Social Welfare Centres' budgets, while the Health Insurance Fund of Republika Srpska finances the contributory health system. Expenditures in social sectors, and those targeting children in particular, are often insufficient. Even in the case of adequate funding, the outcomes for children are below targets. Further, these figures hide significant inequities in outcome between groups of young children, with Roma children, children with disabilities (CwD), children from rural or low-income backgrounds, and migrant/refugee children all facing additional challenges.

1 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.

2 UNICEF (2020). *Situation Analysis of Children in Bosnia and Herzegovina*, (UNICEF: Sarajevo, Bosnia and Herzegovina).

3 Republika Srpska Institute of Statistics (2021). 'Population estimates 2013 – 2021', *Republika Srpska Institute of Statistics*, published online. Available at: https://www.rzs.rs.ba/front/article/5407/?left_mi=None&up_mi=&add=None



i. The Study

Within this context, this Investment Case has been designed to promote better investment in young children from conception to the age of six in RS. It is part of a broader United Nations Joint Programme '*Towards the SDGs Financing Ecosystem in BiH*'. 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 for the promotion of peace and security. An investment in early childhood thus lays a strong foundation for development, increases the effectiveness of the education and health systems, improves the chances of economic productivity and growth, and contributes to a society of equal opportunities that leaves no one behind.

This Investment Case seeks to serve a tool for advocacy and decision-making for child-focused stakeholders in RS, and, ultimately, to support improved outcomes for young children. The ambition of this report is to support RS in implementing a long-term evidence-based programming of social spending. A proactive investment in human capital development will provide the best possible conditions for childhood development, and ultimately foster an environment that nurtures the future leaders of RS to spearhead positive change in the country. Child-focused stakeholders should draw on its language of both economic returns and child rights to motivate for improved investments in children. Further, they should use the evidence generated in this study to highlight the foundational role ECD plays in economic and social development. A failure to invest in young children should be positioned as having the potential to undermine other investments: without a well-educated, healthy and productive workforce, economic development will be stilted.

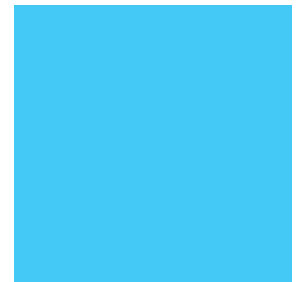
The Investment Case is based on a series of cost-benefit and cost-of-inaction analyses in three sectors most important to ECD – namely, health and nutrition, education, and social protection. A package of interventions based on the *Nurturing Care Framework* was selected in each of these sectors. The short-, medium- and long-term costs and benefits associated with scaling up coverage of these interventions were then identified, quantified as far as possible, and monetized. Analysis was conducted on a range of tools and results are presented for each sector separately. The analysis evaluated the difference in costs and benefits between a baseline ('do nothing') scenario and two Scale-up Scenarios:

Scale-up Scenario A (fast scale-up):

target coverage rates hit in 2030 and then maintained until 2052,

Scale-up Scenario B (slow scale-up):

target coverage rates hit in 2052.



ii. Health and Nutrition

A critical part of ECD is the provision of essential maternal and infant health care, nutritious feeding, and positive parenting. These interventions can protect children from life-threatening illnesses, support their long-term health, and improve physical, cognitive, and psycho-social development. Across RS, improvements in maternal and child healthcare have been witnessed in recent years.

Maternal and child healthcare services in RS are delivered mainly through the public primary healthcare system, free of charge. Nearly 97% of pregnant women receive at least four antenatal care visits, whilst 99.7% deliver in health facilities.⁵ Provision of this care has seen outcomes, such as infant and child mortality rates, improve, and they now sit at a modest 3.8 and 3.4 per 1000 live births.⁶ Meanwhile, important indicators of child development are also promising, with a modest 0.4% of children in RS being recorded as underweight and 6.4% stunted.⁷

Access to quality maternal and child health care remains below an adequate level in RS. Whilst antenatal care coverage has increased, there are concerns over the quality of care being received.⁸ Patronage (post-natal check-up) visits, which are critical to support women in breastfeeding and monitoring their child's growth are only offered once (and, in many cases, do not happen at all). Some health issues which can have serious long-term implications on mothers and children alike, such as perinatal depression, remain largely neglected. Further, a lack of information, dominant cultural practises, and

insufficient support programmes also prevent better child health and nutrition outcomes, particularly in relation to the coverage of age-appropriate breastfeeding and child immunisation. These issues are of particular concern for vulnerable groups, including the Roma, amongst whom sit far above the average at 24 and 27 per 1,000 live births respectively.⁹

An important factor contributing to poor health and nutrition outcomes for children is an overburdened and under-funded public health system. RS allocates a relatively high proportion of its GDP to the health sector; however, compared to other EU countries, the per capita absolute amount is fairly low. In 2021, RS allocated 11.3% of its GDP to the health sector: public expenditures represent 7.8% of GDP, while private spending makes up for the remaining 3.5%.¹⁰ Current health care expenditures have decreased from 13.3% of GDP in 2020 (9.7% public, 3.6% private), but increased in per-capita terms, from 1,055 BAM in 2020 to 1,181 BAM in 2021.¹¹ However, while health expenditures as percentage of GDP are in line with the EU average of 9.92%,¹² RS per capita expenditures translate to just US \$658.76, which is less than one sixth of the EU average of US \$3,476.43.¹³

5 UNICEF (2012). *Bosnia and Herzegovina 2011-12 Multiple Indicator Cluster Survey (MICS)*, (UNICEF Office for Bosnia and Herzegovina: Sarajevo, Bosnia and Herzegovina).

6 UNFPA Country Programme Evaluation: Bosnia and Herzegovina (2013–2018)

7 UNICEF (2012) Multiple Indicator Cluster Survey

8 Ibid.

9 UNICEF (2012) *Multiple Indicator Cluster Survey*

10 Republika Srpska Institute of Statistics (2023). *Health Statistics 2021, Annual Release*. Available at: https://www.rzs.rs.ba/static/uploads/soapstenja/zdravstvo/godisnja_saopstenja/2021/Potrosnja_U_Zdravstvu_2021.pdf

11 Ibid.

12 World Bank (2019). *Current health expenditure (% of GDP)*. Available at: <https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=BA-EU>

13 World Bank (2019). *Current health expenditure per capita (current US\$)*. Available at: <https://data.worldbank.org/indicator/SH.XPD.CHEX.PC.CD?locations=BA-EU>

There are concerns about the equity, efficiency, and sustainability of this model. The biggest burden is carried by employers, with 83.6% of public health sector revenues coming from employer contributions. RS's health financing faces certain sustainability concerns: for instance, RS's rate of mandatory health insurance income contributions have been reduced from 12.5% in 2013 to 10.2% in 2022.^{14 15} There are also concerns about the quality of expenditure in the public health sector. Public health funds are mostly used for capital investments and certain public health and prevention programmes. For example, in 2021, more than one third of total RS health expenditure pertains to hospitals (36.8%), and less than 3% being spent on total preventative care.¹⁶ This seems to indicate that there is a lack of cost-effectiveness in decision-making about the use of health resources. Out-of-pocket (OOP) payments for health remain an important source of financing for the sector; however, they can contribute to inequities and impoverishment. In RS, the share of private expenditure in total expenditure on health is 30.6% in 2021, double the European average, and increased from 27.2% in 2020.¹⁷ These high levels of out-of-pocket payments are concerning as this usually results in the poorest households delaying and avoiding treatment due to their inability to afford the out-of-pocket costs.¹⁸

FINDINGS

Scaling up coverage of essential maternal and child health and nutrition interventions was found to have impressive benefits. Table 1 presents the impact of these interventions on child deaths and disability-adjusted life years (DALYs) lost. Both Scale-up Scenarios have a significant impact on averting maternal and child morbidity and mortality; however, Scale-up Scenario A has greater benefits, as target coverage rates are met quicker. Up to 133 child deaths could be averted in RS over the next thirty years, if this package of health and nutrition interventions were scaled up. Notably, interventions targeting neonates were particularly effective, including case management of prematurity, assisted vaginal delivery and age-appropriate breastfeeding practices.

When monetised, these improved health outcomes have an economic value far higher than the costs incurred to achieve them. The health benefits displayed in Table 1 were transformed into monetary benefits by converting DALYs into a productivity contribution to society following standard practises in the literature. Table 2 presents the results of this monetisation, alongside the estimated costs incurred in scaling up these interventions, and the cost-of-inaction. In total, over the next thirty years,

TABLE 1: ADDITIONAL CHILD DEATHS AND DALYS LOST AVERTED FOR SCALE-UP SCENARIO A AND B.

| | Scale-up Scenario A | | Scale-up Scenario B | |
|--------------------------------|---------------------|-------------|---------------------|-------------|
| | 2023 - 2032 | 2023 - 2052 | 2023 - 2032 | 2023 - 2052 |
| Child Deaths Averted | 42 | 133 | 19 | 83 |
| DALYs Lost Averted in Children | 1,280 | 4,070 | 579 | 2,541 |
| DALYs Lost Averted in Mothers | 525 | 1,969 | 167 | 1,104 |

14 Global Expansion (2013). Global Employer Guide: Bosnia and Herzegovina. Available at: <https://f.hubspotusercontent30.net/hubfs/6815181/Country%20Guides/OLD/Bosnia%20and%20Herzegovina%20-%20Global%20Employer%20Guide.pdf>

15 Official Gazette of Republika Srpska. Nos 114/2017, 112/2019, 49/2021, 119/2021, 56/2022 and 132/2022

16 Republika Srpska Institute of Statistics (2023). Health Statistics 2021, Annual Release. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/zdravstvo/godisnja_saopstenja/2021/Potrosnja_U_Zdravstvu_2021.pdf

17 Republika Srpska Institute of Statistics (2023). Health Statistics 2021, Annual Release. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/zdravstvo/godisnja_saopstenja/2021/Potrosnja_U_Zdravstvu_2021.pdf

18 Ibid.

more than 153 million BAM could be returned to RS in socio-economic gains if Scale-up Scenario A was implemented. This is slightly lower in Scale-up Scenario B at just over 98 million BAM. The costs of scaling up these interventions was also estimated and is far lower than these anticipated benefits. In the fastest Scale-up Scenario (A), a cost of 50 million BAM would accrue by 2052, compared to almost 28 million BAM in the slower Scale-up Scenario (B). Whilst these costs are significant, they are far outweighed by anticipated economic benefits. When comparing these costs and benefits, the subsequent cost-of-inaction (in other words, the opportunity cost of failing to scale-up) is noteworthy:

- For **Scale-up Scenario A**, the **cost of inaction** sits at **over 103 million BAM** when studied until **2052**.
- The **Scale-up Scenario B** reflected **slightly lower costs of inaction**, at **over 70 million BAM** by **2052**.

Investments in ECD were also found to have a strong rate of return, especially over the long-term:

- In **Scale-up Scenario A**, for **every 1 BAM** invested, **3 BAM** are expected to be returned to the economy between 2023-2052.
- In **Scale-up Scenario B**, the BCR is even higher. Across the full study time horizon, for **every 1 BAM invested**, **4 BAM** are expected to be returned in socio-economic benefits.

TABLE 2: ECONOMIC BENEFITS, COSTS, AND THE COST-OF-INACTION FOR SCALE-UP SCENARIOS A AND B. EXPRESSED IN BAM, ADJUSTED FOR INFLATION AND DISCOUNTED AT A RATE OF 3%.

| | Scale-up Scenario A | | Scale-up Scenario B | |
|------------------------------------|---------------------|-------------|---------------------|-------------|
| | 2023 - 2042 | 2023 - 2052 | 2023 - 2042 | 2023 - 2052 |
| Total Additional Economic Benefits | 37,405,042 | 153,364,067 | 15,400,717 | 98,160,434 |
| Total Additional Costs | 15,792,430 | 50,053,815 | 5,396,413 | 27,937,533 |
| Cost of Inaction | 21,612,612 | 103,310,252 | 10,004,305 | 70,222,901 |

iii. Education

Enrolment in ECEC has been improving in RS in recent years, but remains concerningly low.¹⁹ Across RS, the enrolment rate in full-day or half-day preschool programmes for 3- to 6-year-olds in the 2022/23 pedagogical year sits at 42.5%.²⁰ Promisingly, enrolment in full- or half-day ECEC has been steadily increasing in recent years, rising from 38.5% in 2021/22, 37.1% in 2019/20, and 34.2% in 2018/19.²¹ Further, in 2022/23, enrolment rate for children aged 5 to 6 reaches 47.6% when including those children attending the preparatory preschool programme prior to enrolling in primary school.²² **The private sector has fuelled growth in the ECEC sector, growing its share of the total number of facilities and children enrolled.** Across RS, the number of children enrolled in public preschools increased by 17% 2018/19

to 2021/22. Meanwhile, in private preschools enrolment has grown by 69% in the same time period. It is important to note, however, that the public sector still remains the most significant provider of ECEC: out of the total 11,990 children between 3 and 6 years of age enrolled in ECEC in 2022/23, public institutions cater for 8,393 children (70%), compared to 3,597 (30%) in the private sector.²³

Enrolment patterns are linked to the socio-economic and location status of the household. Children from households where one or both parents/caregivers are unemployed, or those from peripheral areas outside of the city, are more likely to struggle to gain access to ECEC. On average in RS, 82% of children enrolled in preschool come from families where both parents are employed, whilst 16% come from families with one parent employed. Children from households where both parents are unemployed constitute just 1% of the preschool population. These patterns are highly inequitable, with children from poorer and/or more vulnerable backgrounds less likely to gain access to these vital educational and developmental services, thus threatening to entrench inter-generational cycles of poverty.

Progress in ECEC has been supported by recent legislation. Since 2008, ECEC was moved from the Ministry of Health and Social Protection to being under the remit of the MoEC, which is the proponent of the *RS Law on Preschool Education and Upbringing (2015)* adopted by the National Assembly of Republika Srpska. The Law

19 Preschool programmes vary, with facilities offering half- and full-day options, as well as being divided between child care services (six months to three years) and ECEC services (three to six years). This study focuses solely on ECEC services for children three to six years of age.

20 Republika Srpska Institute of Statistics (2023). Preschool institutions in the working year 2022/2023, Education statistics annual release 15/23. Calculation based on 11,990 children over 3 years of age enrolled in ECEC in 2022/23, and an estimated population of children aged 3–6 of 28,245 in 2022 (Source: Republika Srpska Institute of Statistics (2020). Republika Srpska Population Projections, 2019–2070. Population estimates refer to Scenario S2).

21 Republika Srpska Institute of Statistics (2022). Preschool Education 2021/2022 Statistical Bulletin. Calculation based on children over 3 years of age enrolled in ECE, and the estimated population of children aged 3–6 provided by Republika Srpska Institute of Statistics (2022). Population estimates, 2013–2021

22 Republika Srpska Institute of Statistics (2023). Preschool institutions in the working year 2022/2023, Education statistics annual release 15/23. Calculation based on 4,432 children aged 5 to 6 enrolled in a condensed preparatory programme in 2022/23, and an estimated population of children 5–6 of 9,317 in 2022 (Source: Republika Srpska Institute of Statistics (2020). Republika Srpska Population Projections, 2019–2070. Population estimates refer to Scenario S2)

23 Republika Srpska Institute of Statistics (2023). Preschool institutions in the working year 2022/2023, Education statistics annual release 15/23. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/obrazovanje/predskolsko_obrazovanje/2022-2023/PredskolskoObrazovanje_2022_2023.pdf

supports the expansion of preschool coverage and is intended to develop an enabling environment for positive early childhood development. Attendance of a preparatory preschool programme for children in the year before primary school is not required by law, but instead recommended by the government. Further, this programme is financed and overseen by the RS MoEC, unlike all other pre-primary programmes which are financed at municipality/city level. However, coverage of this preparatory programme is far from universal and it is often of insufficient duration to have a significant impact on child development.

Public financing of ECEC, in accordance with the RS Law on Preschool Education, comes almost exclusively from municipal/city governments. Whilst it is difficult to monitor public and private expenditures on ECEC, when aggregated to RS level, it is clear that ECEC is being under-prioritized and under-funded. Public expenditure for preschool education and upbringing in RS in 2021 amounts to only 0.29% of GDP.²⁴ Accounting also for private and foreign funds expenditures, this figure rises to 0.42%, with public financing representing 70.9% of the total ECEC budget, compared to 29.1% coming from private sources and only 0.02% from foreign funds.²⁵ The total budget allocated to ECEC is much lower than the average public spending on ECEC in OECD countries of just over 0.8% of GDP.²⁶ Promisingly, total public and private expenditure for formal education in RS are high, and in 2021 accounted for 4.4% of GDP in 2021. Despite decreasing by 0.1% compared to 2020,²⁷ this is above neighbouring Western Balkan nations, such as Serbia and Croatia, whose education spending stand at 3.6% and 3.9% of GDP respectively.²⁸ However, ECEC had a share of only 9.3% of total RS expenditure for educational institutions, compared to 44.8% for primary education, 19.4% for secondary, and 26.5% for higher education.²⁹

24 Republika Srpska Institute of Statistics (2022). Financial statistics of education, 2021. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/obrazovanje/finansijska_statistika_obrazovanja/2021/Finansijska_statistika_obrazovanja_2021.pdf

25 Ibid.

26 OECD countries spend on average just over 0.8% of GDP on early childhood education and care, with large variations across countries. Countries spend more on pre-primary education than childcare, up to approximately 1% vs 0.5%. Source: OECD Family Database (2023). Public spending on childcare and early education. Available at: https://www.oecd.org/els/soc/PF3_1_Public_spending_on_childcare_and_early_education.pdf

27 Republika Srpska Institute of Statistics (2022). Financial statistics of education, 2021. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/obrazovanje/finansijska_statistika_obrazovanja/2021/Finansijska_statistika_obrazovanja_2021.pdf

28 World Bank (2019). Government expenditure on education, total (% of GDP). Available at: <https://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS?locations=RS-ME-HR>

29 Republika Srpska Institute of Statistics (2022). Financial statistics of education, 2021. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/obrazovanje/finansijska_statistika_obrazovanja/2021/Finansijska_statistika_obrazovanja_2021.pdf

Public financing from the entity is limited to support for children with disabilities (CwD), for children without parental care, and for provision of three-month programmes in the year prior to primary school. The Public Fund for Child Protection of RS provides compensation for co-financing the stay in a preschool institution for children without parental care, as well as for children with developmental disabilities. Public expenditure on ECEC at city/municipal level is not ring-fenced in the entity's legislation or policy, and instead is highly dependent on local political will and budgetary room. Therefore, the public financing landscape for ECEC varies significantly across the entity, given the divergence in policy and organizational structure between different municipalities/cities. In those municipalities/cities which have more limited fiscal space or have sparser or faster ageing populations, public financial support to ECEC can be very limited. As a proportion of total municipal/city spending, ECEC constitutes less than 3% in some municipalities/cities and up to 10% in others.³⁰ This has a commensurate impact on access and coverage, as well as the equity, of ECEC services. Parental/caregiver contributions to enrol their children in pre-primary education are required in both public and private facilities, which can be a barrier to access.

FINDINGS

Scaling up ECEC for RS's children could have significant benefits. Two pathways have been identified and monetised: the benefits of improved educational outcomes, and the increase in female labour force participation.



As high-quality ECEC is associated with improved child development and school readiness outcomes, children who are exposed to this intervention are more likely to **stay in school for longer, experience a better learning experience, and graduate from secondary school.**³¹

30 Data provided by the MoEC.

31 A. Muroga, H. T. Zaw, S. Mizunoya *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). | P. Gertler, J. Heckman and R. Pinto *et al.* (2021). 'Effect of the Jamaica Early Childhood Simulation Intervention on Labour Market Outcomes at age 31', *World Bank Policy Research Working Paper*, 9787. | N. Angrist, D. K. Evans, D. Filmer, R. Glennerster, F. Halsey Rogets and S. Sabarwal (2020). 'How to Improve Education Outcomes Most Efficiently? A comparison of 150 interventions using the new Learning-Adjusted Years of Schooling Metric', *Center for Global Development, Working Paper 558*

In this study, the impact of ECEC on **years of schooling** and **Learning-Adjusted Years of Schooling (LAYs)** are quantified. The impact of these improved educational outcomes is then monetized by estimating their contribution towards better lifelong productivity and earning potential.



The economic benefits of increased **labour market participation of women**, as fewer women will have to stay at home for **child-care responsibilities** if more young children are enrolled in preschool.

The impact of scaling up ECEC services is impressive.

Whilst under the Baseline Scenario, the expected years of schooling would remain at 11.7 years per child, this could increase to 12.8 years by 2050. Across the time horizon, this would mean that an additional 235,000 years of schooling would be realised in Scale-up Scenario A and just under 135,000 in Scale-up Scenario B. Importantly, women also stand to particularly benefit from these time savings for caregivers associated with improved ECEC coverage. Studies show that women shoulder the majority of unpaid care work, including care for young children.³² For this reason, women stand to benefit disproportionately from improved access to ECEC services, including in improving their ability to participate in income-generating activities. Analysis suggests that increasing ECEC enrolment could result in a 0.5 percentage point increase in the female labour force participation rate. This would result

in an additional 1,341 women on average per year in the labour force in Scale-up Scenario A (2022-2052 average), or 765 women on average per year in Scale-up Scenario B.

When monetised, these benefits for children and female caregivers exceed the anticipated costs of scaling up ECEC services in RS.

The majority of these benefits stem from the high rate of return associated with increased years of schooling. Under Scale-up Scenario A, the economic benefits of increasing years of schooling attained amount to over 11 billion BAM across the study time horizon. Comparatively, Scale-up Scenario B has lower, but still enormous, economic benefits, at 6 billion BAM. Further, increasing female labour force participation also translates into significant economic returns. Scale-up Scenario A sees a greater incidence of economic benefit, at 170 million BAM across the study time horizon, this compares to over 94 million BAM in Scale-up Scenario B. Combined, these economic benefits are greater than the projected costs (Table 3). As a result, there is a very high cost-of-inaction of ECEC not being scaled up:

- In the fast **Scale-up Scenario A**, the COI suggests that **not investing in ECEC could cost RS over 9.4 billion BAM** when studied until 2052.
- The slow **Scale-up Scenario B** reflected **slightly lower costs of inaction**. It is estimated that not investing in ECEC could **cost RS over 5 billion BAM** in the longest time horizon (to 2052).

Ultimately, therefore, investments in ECEC have a strong, positive return on investment – a rate that is even larger over the long-term:

- Under **Scale-up Scenario A**, for **every 1 BAM** invested in ECEC, **6.7 BAM** would be expected to be returned in socio-economic benefits by 2052.
- Under **Scale-up Scenario B**, this would be a little lower at **6.5 BAM** in return.

TABLE 3: ECONOMIC BENEFITS, COSTS, AND THE COST-OF-INACTION FOR SCALE-UP SCENARIOS A AND B, ACROSS DIFFERENT TIME HORIZONS IN MILLIONS OF BAM AND DISCOUNTED AT 3%.

| | Scale-up Scenario A | | Scale-up Scenario B | |
|------------------------------------|---------------------|-------------|---------------------|-------------|
| | 2023 - 2032 | 2023 - 2052 | 2023 - 2032 | 2023 - 2052 |
| Total Additional Economic Benefits | 3,266 | 11,101 | 920 | 6,126 |
| Total Additional Costs | 473 | 1,659 | 138 | 945 |
| Cost of Inaction | 2,793 | 9,442 | 782 | 5,180 |

³² L. Addati, U. Cattaneo and E. Pozzan (2022). *Care at Work: Investing in Care Leave and Services for a More Gender Equal World of Work*, (Geneva, ILO). | G. Azcona, A. Bhatt, W. Cole, R. Gammarano and S. Kapsos (2020). *The Impact of Marriage and Children on Labour Market Participation*, (Geneva: ILO and UN Women).

iv. Social Protection

Poverty can be damaging to child development and is associated with poorer health, nutrition, and education outcomes for those exposed to it. In RS, according to the most recent official poverty statistics, 17.4% of households lived below the poverty line in 2015,³³ and the situation has very likely worsened due to the impact of the recent COVID-19 pandemic, inflation, and economic crises. Further, over one third (36.6%) of all poor households in BiH are located in RS.³⁴ Children are particularly vulnerable to poverty, with consistently higher poverty rates than the general population. Child poverty is a particularly important issue to tackle in RS, as the effects can last well into adulthood.³⁵ According to a UNICEF analysis of multidimensional poverty and material deprivation, almost all children under 5 years of age (98%) in BiH are deprived in at least one dimension, and a third (33%) in four or more dimensions at a time.³⁶ Concerningly, children aged 0 to 4 in RS are likely to be deprived in Nutrition (72%), Child Development (58%), Violent Discipline (53%) and Health (29%).³⁷ This suggests that young children in RS are exposed to poverty, deprivation and toxic stress.

Of particular concern in RS's social protection system are families from rural areas, female-headed households, Roma families, and families with children with disabilities – all of whom are vulnerable across numerous dimensions and may struggle to access social protection. Inequities are strongly correlated with the socio-economic status of the households. In RS, the poverty rate

in rural areas (20.9%) is nearly double that in urban areas (11.9%),³⁸ but social benefits and costs of living incentivize living in rural areas. The gender of the head of the household bears significant influence on relative poverty: in RS, the poverty rate of households whose head is a female is 23.2%, in contrast with 15.2% for male-headed households.³⁹ Further, it is estimated that having a disability increases the probability of becoming poor by 18%,⁴⁰ and that almost 80% of Roma children live in poverty.⁴¹

The Law on Child Protection in RS provides a safety net for households with children. Child Support is one of the rights in the field of child protection and a specific form of social care for children implemented in RS. The Law provides for a child allowance to children up to the age of 15, if they attend school regularly and their households have a monthly income below predefined thresholds, and for all children with developmental delays and disabilities. Despite the progress brought by the implementation of the RS Law on Child Protection and by the several key amendments made in 2018, 2019 and 2021, there is still the need to harmonize it with the legal provisions within the Convention on the Rights of the Child. Whilst this Law has advanced social protection, population coverage and adequacy of the child allowance remain too limited to resolve poverty in early childhood across RS.

Expenditure on social protection for families and children is low in RS, and sits at just 0.9% of GDP in 2021.⁴² Promisingly, the total budget allocated to social protection

33 Agency for Statistics of Bosnia and Herzegovina (2018). *Household Budget Survey in Bosnia and Herzegovina 2015. TB15*, (Agency for Statistics: Sarajevo, Bosnia and Herzegovina)

34 Ibid.

35 UNICEF (nd). Social Protection. Available at: <https://www.unicef.org/bih/en/node/501>

36 Lucia Ferrone & Yekaterina Chzhen (2015). National Multiple Overlapping Deprivation Analysis: Child Poverty and Deprivation in Bosnia and Herzegovina. Office of Research Working Paper WP 2015-02. The dimensions analyzed are the following: nutrition, health, child development, violent discipline, information access, and housing.

37 Ibid.

38 Agency for Statistics of Bosnia and Herzegovina (2018). *Household Budget Survey in Bosnia and Herzegovina 2015. TB15*, (Agency for Statistics: Sarajevo, Bosnia and Herzegovina)

39 Ibid.

40 Initiative for Better and Humane Inclusion, 2016

41 UN Committee on the Rights of the Child (2019) *Bosnia and Herzegovina Country Report*

42 Republika Srpska Institute of Statistics (2023). Integrated system of social protection 2021. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/socijalna_zastita/integrisani_sistem_socijalne_zastite/2021/Integrisani_Sistem_Socijalne_Zastite_2021.pdf

expenditures in RS amounts to 21.7% of the GDP. This is still less than two thirds of the EU average, but in line with western Balkan neighbours, such as Croatia and Serbia who spent 24.3% and 21.9% respectively.⁴³ Out of the total amount allocated to social protection, around 75% pertains to contributory social insurance.⁴⁴ Within the share allocated to non-contributory social assistance benefits (21%), more than 60% (or 2.9% of GDP) is spent on war-related benefits, and only 20% on families and children, which translates into only 0.9% of GDP.⁴⁵ This amount has remained fairly stable throughout the years, sitting at 1.0% of GDP in 2020 and 0.8% in 2019.⁴⁶

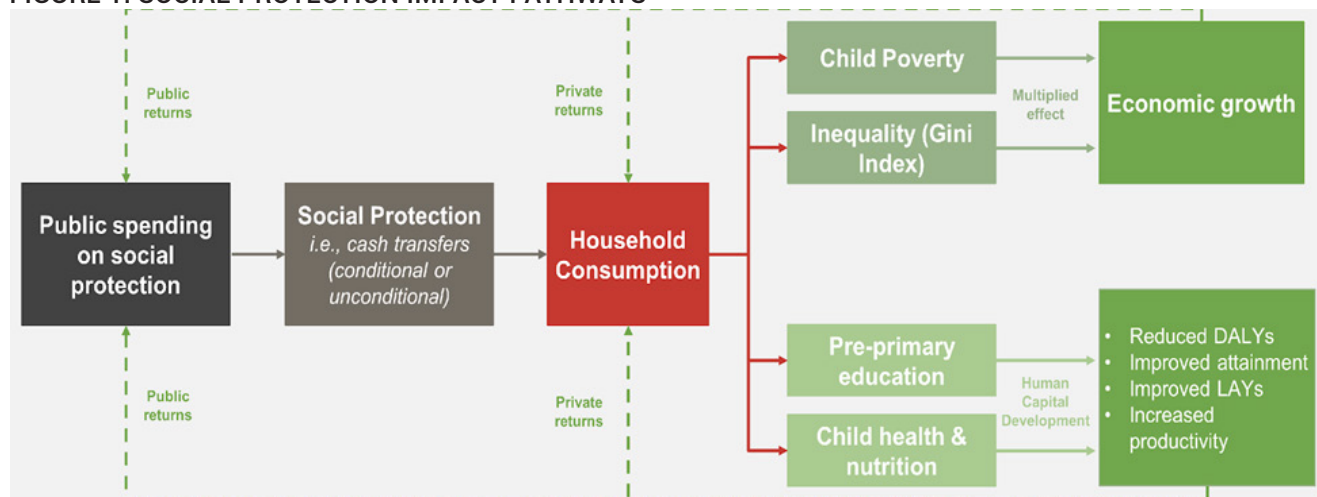
Within family/child benefits, more than 60% are non-means tested, while only 39% are specifically targeting the most vulnerable.⁴⁷ Given that children are particularly vulnerable to poverty, these spending patterns show a worrying status quo where insufficient funding is dedicated to the upliftment and support of children and families. Zooming into the RS Child Support allowance, the number of beneficiaries in 2021 amounts to 12,033, covering only 17,395 children.⁴⁸ The total number of children covered by the allowance therefore represents just 11.6% of the child population aged 0–15 in RS.⁴⁹ Further, total beneficiaries have been dramatically decreasing in the past four years: from 21,838 in 2018 to 15,388 in 2019, and to 13,381 in 2020.⁵⁰ Although the total number of children in RS is also rapidly decreasing, RS ought to still remain cautious that there are not barriers to accessing the child allowance for its most vulnerable children and families.

RS is making good progress with the implementation of a solidarity contribution of 0.25% of net salary to the RS Solidarity Fund. This is intended specifically to meet the needs of vulnerable children.⁵¹ Moreover, contributions to the Child Protection Fund have increased from 1% in 2008 to 1.70% in 2018, indicating the increasing priority placed upon child protection by RS.⁵² However, the existing social protection system is particularly inefficient at targeting social transfers. Further, the monetary value of social transfers is low and insufficient to fulfil basic needs, and poor targeting is making their effects on poverty reduction negligible. Thus, there is a clear need to both increase spending on child-focused social protection in RS and to improve the efficiency of spending and targeting of the social protection system.

FINDINGS

Five cash transfers interventions were analysed, guided by RS's Child Protection Law and a universal cash transfer model. These interventions each have two aspects – the families eligible for the grant, and the size of the cash transfer itself. Four interventions (Scenarios A-D) are based on the Child Protection Law. The fifth intervention (Scenario E) is based on a universal child allowances, given to all families with children younger than seven. The study reports on the results of the modelling for each of these interventions (Scenarios A to E); however, for simplicity in this Executive Summary, only those of Scenario E (the universal child allowance) are presented.

FIGURE 1: SOCIAL PROTECTION IMPACT PATHWAYS



43 EuroStat (2022). Social Protection Expenditure. Available at: <https://ec.europa.eu/eurostat/web/main/data/database>

44 Ibid.

45 Ibid.

46 Ibid.

47 Ibid.

48 Republika Srpska Institute of Statistics (2022). Social Welfare 2022. Available at: https://www.rzs.rs.ba/static/uploads/bilteni/socijalna_zastita/Bilten_Socijalna_Zastita_2022_WEB.pdf

49 Republika Srpska Institute of Statistics (2022). Social Welfare 2022. Available at: https://www.rzs.rs.ba/static/uploads/bilteni/socijalna_zastita/Bilten_Socijalna_Zastita_2022_WEB.pdf

50 Ibid.

51 N. Obradovic and M. Jusic (2019). *ESPN Thematic Report on Financing social protection: Bosnia and Herzegovina*, (ESPN: Brussels, Belgium)

52 Ibid.

TABLE 4: BENEFITS ASSOCIATED WITH SCENARIO E (UNIVERSAL CHILD ALLOWANCE), 2023-2032 AND 2023-2052.

| | 2023 - 2032 | 2023 - 2052 |
|-----------------------------|-------------|-------------|
| Child Deaths Averted | 690 | 1,918 |
| DALYs Lost Averted | 27,650 | 77,248 |
| Stunting Cases Averted | 9,920 | 27,712 |
| Secondary School Completion | 9,520 | 26,593 |

The effects of the implementation of the new cash transfer for children, were analyzed using a life cycle approach.

These pathways include both direct and indirect channels, spanning health, education and labour market outcomes: increased household consumption reduces child poverty and inequality, and has a multiplier effect on economic growth, while the transfer tends to also increase access to pre-primary education, and health services, thus contributing to human capital development and overall increased productivity.

Scaling up cash transfers for households with young children is anticipated to have major positive impacts.

Table 4 summarises the benefits associated with Scenario E and is divided between impacts related to health and nutrition, and those related to education. Clearly, scaling up social protection measures for young children will have an important multi-sectoral impact, creating a strong enabling environment for good health, adequate nutrition, and early learning opportunities. By 2052, over 1 900 child deaths and nearly 28 000 stunting cases could be averted in RS. Further, an additional 26 500 children would be

expected to complete secondary school.

When monetised, these benefits could have a substantial impact on RS's economy. Significantly, this social protection intervention is associated with a reduction in income inequality. Further, RS stands to gain 2.6 billion BAM over a thirty-year period through the implementation of a universal child allowance. This compares to the additional costs, associated with providing the cash transfer, which are expected to amount to under 400 million BAM in the same period. Taken together, therefore:

In the **universal Scale-up Scenario E**, the cost of inaction would amount to **2.2 billion BAM** until **2052**.

The rate of return for Scenario E was the highest for any of the social protection interventions considered:

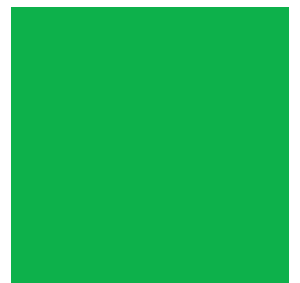
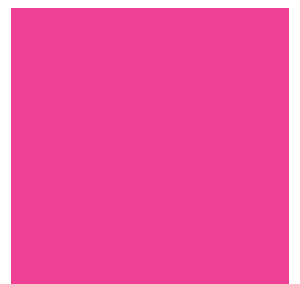
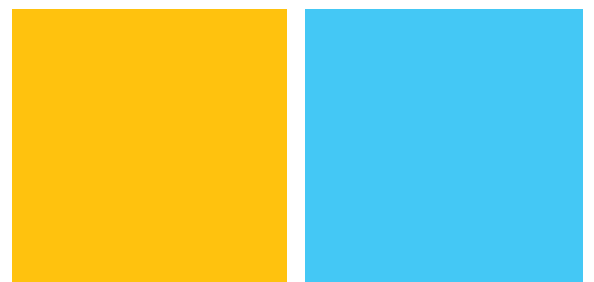
For every **1 BAM invested** between **2023 and 2052** scaling up a universal child allowance in RS could result in **6.7 BAM** returned to economy in socio-economic benefits.

TABLE 5: ECONOMIC BENEFITS, COSTS, AND THE COST-OF-INACTION OF SCENARIO E, ACROSS DIFFERENT TIME HORIZONS IN MILLIONS OF BAM AND DISCOUNTED AT 3%.

| | 2023 - 2032 | 2023 - 2052 |
|------------------------------------|-------------|-------------|
| Total Additional Economic Benefits | 936 | 2,597 |
| Total Additional Costs | 179 | 387 |
| Cost of Inaction | 757 | 2,209 |

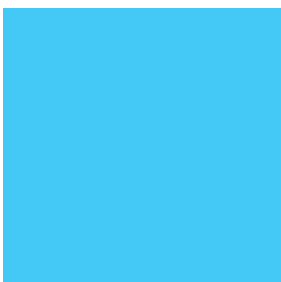
v. Conclusion and recommendations

This study presents the most solid evidence collated to date to justify investment in ECD in RS. Its findings echo those reported in the global literature on the strong rate of return associated with ECD investments. In the context of pressing demographic challenges, the impetus for RS to scale-up services for its young children is now more important than ever. Capitalizing on opportunities presented by ECD will require intensive, coordinated efforts. A set of policy recommendations has been developed to guide these efforts and maximize the potential for success. In summary, these recommendations are:



| | |
|---|--|
| STRENGTHEN AND HARMONISE POLICY AND LEGAL STRUCTURES | Enforce the harmonisation and implementation of existing policies. |
| | Close the remaining legal and policy gaps which hinder ECD. |
| | Support human capital capacities and infrastructure to implement legislation and policies. |
| OPTIMISE THE USE OF PUBLIC BUDGETS FOR HUMAN CAPITAL DEVELOPMENT | Conduct a child-focussed public expenditure review. |
| | Undertake a fiscal space analysis for ECD. |
| | Reallocate existing budgets towards young children and protect child-focussed spending from budget cuts. |
| | Prioritise public investment by (cost-)effectiveness. |
| | Maximise technical efficiency, by reducing costs without jeopardizing quality |
| DEVELOP STRONG PARTNERSHIPS WITH THE PRIVATE SECTOR | Set up an entity-wide ECD Working Group with public and private sector stakeholders |
| | Craft policies designed to ensure adequate support for both public and private providers of ECEC services. |
| | Create a multi-year operational and financial plan for children to support the link between policy and implementation. |
| REGULATE AND MONITOR QUALITY STANDARDS OF ECD SERVICES | Bodies monitoring and regulating service provision need to be strengthened. |
| | Monitoring services need to link closely with practical support to improve quality. |

| | |
|---|--|
| MAINSTREAM EQUITY AND INCLUSIVITY | Policy and programme design for young children must be inclusive. |
| | Stakeholders must strongly advocate and make the economic and rights-based case for the need to tackle inequities in early childhood. |
| | The financial architecture underpinning the provision of ECD services must be reconsidered. |
| SUPPORT DATA AND INFORMATION COLLECTION, MANAGEMENT, AND DISSEMINATION | Government stakeholders should set up an ECD Data Working Group, tasked with improving data systems for ECD. |
| | Data related to a common list of ECD indicators must be routinely collected. |
| | A central digitized open-access database should be developed to facilitate monitoring and evaluation. |
| | A government body should be given clear responsibilities in data governance for ECD. |
| | RS should look to undertake a new Multiple Indicator Cluster Survey (MICS) as soon as possible to improve the accuracy of data for strategic planning in the ECD sector. |
| | Create an enabling environment for the digital transformation of the public sector. |
| MOBILISE COMMUNITY ACTION AND DRAW ON INNOVATIVE LOCAL SOLUTIONS | Stimulate grass-root campaigns to demand quality services. |
| | Development partners should provide funding to innovators in the ECD sector. |
| | Local governments and stakeholders should create policies within their mandate to support young children. |
| | Lesson learning and sharing of experiences between municipalities/cities should be encouraged. |



INTRODUCTION

OVERVIEW

Republika Srpska (RS), as an entity of Bosnia and Herzegovina (BiH), has one of the world's most rapidly ageing and shrinking populations. Estimates suggest that by 2060, almost a third of the population will be 65 years of age or older.¹ Moreover, the population is shrinking due to high levels of emigration among families and well-educated youth.² This presents a challenge that threatens long-term development, as well as the quality and sustainability of BiH's social service systems. This is particularly the case as the relatively small working-age population ultimately supports the elderly. This is expected to slow economic growth and put public finances under pressure (due to the high costs of health care and pensions for the large elderly population) and thus divert public spending away from children.³ Compounding this issue, RS also has one of the lowest birth rates in the world, with only 8.2 births per 1000 people in 2021.⁴ These demographic trends make it more important than ever that every young child is nurtured and supported to reach their full potential, as the future of BiH rests with them.

Recognizing the importance of the RS's children, RS has a variety of policies and strategies focused on improving children's well-being. For instance, RS's 2022–2030 Education Strategy and the Program for Early Childhood Development in RS represent two successful examples of how RS authorities have been collaborating on the implementation of child-focused policies that contain goals for improving legislative protections for children, as well for defining cross-sectoral priorities focused on all developmental aspects of children. The BiH-level Action Plan for Children of Bosnia and Herzegovina also includes a specific focus on vulnerable groups such as child refugees, and includes improvement of education and upbringing as key focus areas.⁵

However, the conditions needed for RS's young children to meet all their rights and develop to their potential are

still not in place. In Republika Srpska, inadequate and poor-quality investments in social sector services have created a situation where young children and their families do not have universal access to the quality health, education, and social protection services they need. The enrolment rate in full-day or half-day early childhood education and care (ECEC) programmes for 3- to 6-year-olds, despite steadily increasing in recent years, still sits at 42.5% in 2022/23⁶, whilst just 72% of children received diphtheria, pertussis, and tetanus (DPT) immunization. This disappointing coverage of vital early childhood development (ECD) services is a threat to the long-term growth and human capital development of the young people in this entity.

This report is designed to promote better investment in young children between the ages of 0 and 6 in Republika Srpska. It is the result of a detailed study into the potential costs and benefits of investments into ECD services in the entity. These services span the health, education and social protection sectors. The broad objective of this report is to outline an investment case using findings from a cost-benefit analysis of a multi-sectoral package of ECD interventions. It seeks to serve as a tool to guide advocacy and decision-making for child-focused stakeholders, including the government and UN counterparts, with the ultimate goal of supporting and strengthening ECD in BiH at state, entity, and municipal/city level. Reports have been produced for Republika Srpska, the Federation of Bosnia and Herzegovina, and Brčko District, with the specific aims of:

- Generating empirical evidence on the short-, medium-, and long-term costs and benefits resulting from the provision and scale-up of quality interventions in early childhood development;
- Providing decision-makers with a tool that enables informed investments and evidence-based planning and programming;
- Guiding and advocating for the design and/or expansion of quality and inclusive ECD services tailored to the specific contexts;

1 N. Pranjic and M. Racic (2020). 'Bosnia and Herzegovina', in *Extended Working Life Policies*, (Springer, Cham)

2 UNICEF (2020). *Situation Analysis of Children in Bosnia and Herzegovina*, (UNICEF: Sarajevo, Bosnia and Herzegovina)

3 R. Lee and A. Mason (2017). 'Cost of Ageing', IMF Finance and Development, March 2017: Volume 54

4 Republika Srpska Institute of Statistics (2022). *Demographic Statistics 2022*, (Institute of Statistics: Banja Luka, Bosnia and Herzegovina). Available at: https://www.rzs.rs.ba/static/uploads/bilteni/stanovnistvo/BiltenDemografiskaStatistika_2022_WEB.pdf

5 Council of Ministers of Bosnia and Herzegovina (2015). *Action Plan for Children of Bosnia and Herzegovina 2015–2018*, (Council of Ministers: Sarajevo, Bosnia and Herzegovina)

6 Republika Srpska Institute of Statistics (2023). *Preschool institutions in the working year 2022/2023*, Education statistics annual release 15/23. Calculation based on 11,990 children over 3 years of age enrolled in ECEC in 2022/23, and an estimated population of children aged 3–6 of 28,245 in 2022 (Source: Republika Srpska Institute of Statistics (2020). *Republika Srpska Population Projections, 2019-2070*. Population estimates refer to Scenario S2)

7 Republika Srpska Institute of Statistics (2022). *Health Statistics 2021, Annual Release*. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/zdravstvo/godisnja_saopstenja/2021/ZdravstvenaStatistika_2021.pdf

- Leveraging the existing public funds for children through optimization and strategic re-channeling, and advocating for additional resources for children for accelerated SDG achievement.

The ambition of this report is to support Republika Srpska in implementing a long-term, evidence-based programming of social spending to achieve proactive investment in human capital development.

The Investment Cases are produced with support of the Joint SDG Fund. Together with the UN Country Team in Bosnia and Herzegovina, the Joint SDG Fund supports authorities in the country to accelerate progress towards the Sustainable Development Goals (SDGs) and to deliver on the commitment of the 2030 Agenda to leave no one behind. The reports are part of a broader UN Joint Programme (JP) “Towards the Sustainable Development Goals Financing Ecosystem in Bosnia and Herzegovina”. The JP focuses on the implementation of Agenda 2030 and, by combining the expertise of UNICEF, UNDP, UN Women, ILO and WHO, it aims to foster dialogue and support the governments to establish an integrated ecosystem that allows for systemic financing of the SDGs, enabling

informed and targeted investment of public funds, as well as the mobilization of additional financing for sustainable development. Moreover, this proactive spending focus will align more strongly with BiH’s Sustainable Development Goal Financing Framework (SDG-FF), as the analysis will illustrate, as a form of productive investment that will improve RS’s public finances in the long run.

Structure of the Investment Case

This Investment Case is structured as follows:

FIGURE 1: REPORT STRUCTURE

CONTEXT

What is early childhood development?

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,

FIGURE 1: REPORT STRUCTURE



brain development hits 90%.⁸ This is the period in which children will acquire physical and motor skills, expand their cognitive capacity, and develop their psycho-emotional behaviours, personalities, and social skills.

Interventions in early childhood can support development and increase the likelihood of long-term wellbeing, productivity and prosperity (at both an individual and a societal level). For children to reach their full potential, they need a range of interconnected and diverse supports. The Nurturing Care Framework is an internationally recognized framework conceptualizing the approach to helping children to survive and thrive, and transforming health and human potential in young children (Figure 2). It posits that to maximize early childhood development, young children require nurturing care interventions across five components: good health, adequate nutrition, safety and security, early learning opportunities, and responsive caregiving. This study draws on the components of the Nurturing Care Framework by taking a more holistic approach to ECD. We examine an array of interventions across the health, education, and social protection sectors. These interventions include antenatal care, vaccination, well-baby visits, increased preschool enrolment, and child allowances.

FIGURE 2: THE NURTURING CARE FRAMEWORK⁹



8 First Things First (2022). 'Why Early Childhood Matters: Brain Development', First Things First, accessed 03 February 2022. Available at <https://www.firstthingsfirst.org/early-childhood-matters/brain-development/>

9 Nurturing Care (2021). Nurturing Care for Early Childhood Development, published online. Accessed 19.08.21. Available at <https://nurturing-care.org/>

Why invest in ECD?

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, early childhood is a phase where young children 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 the society as a whole.¹⁰ However, despite the recognition of the value of ECD as a policy option and investment opportunity, ECD is underfunded globally.

Evidence shows us that by the age of six, we can predict which children are likely to succeed in life. For instance, 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 display minimum competencies in mathematics, compared to 49% of pupils without pre-primary education experience.¹¹ In RS, a recent study has proved a strong positive correlation between attending the RS preparatory preschool programme and school readiness.¹² Further, at the BiH level, a study conducted in 2022 shows that children who attended pre-primary programmes for two years or more have significantly better educational achievement in mathematics and natural sciences than those children who did not attend, or who did so for less than one year.¹³ Some children in BiH are also exposed to toxic stress (exposure to strong, frequent and/or prolonged adversity)¹⁴, inadequate nutrition (especially low breastfeeding coverage and rising rates of obesity), insecure housing arrangements, and lack of parental stimulation or pre-primary education services. These factors have all been found to damage brain architecture, lower future

10 Heckman Equation (2021). The Heckman Curve, accessed 19.08.21. Available at <https://heckmanequation.org/resource/the-heckman-curve/>

11 UNICEF (2019). A World Ready to Learn: Global Report on Pre-Primary Education, (UNICEF: New York, USA)

12 Cvijanović, N., Mojić, D. (2020). Institucionalna pedagoška intervencija u ranim godinama života na putu cjeloživotnog učenja [Institutional pedagogical intervention in early years in the context of early learning]. Croatian Journal of Education, 22 (Sp.Ed.3), 51-69. <https://doi.org/10.15516/cje.v22i0.3909>

13 Agency for Preschool, Primary and Secondary Education (2022). Preschool Education and Care as a Determinant of Student Achievement in Bosnia and Herzegovina in TIMSS 2019. Available at: <https://aposo.gov.ba/sadrzaj/uploads/%D0%90naliza-zadataka-po-sadrzajmim-i-kognitivnim-domenama-TIMSS.pdf>

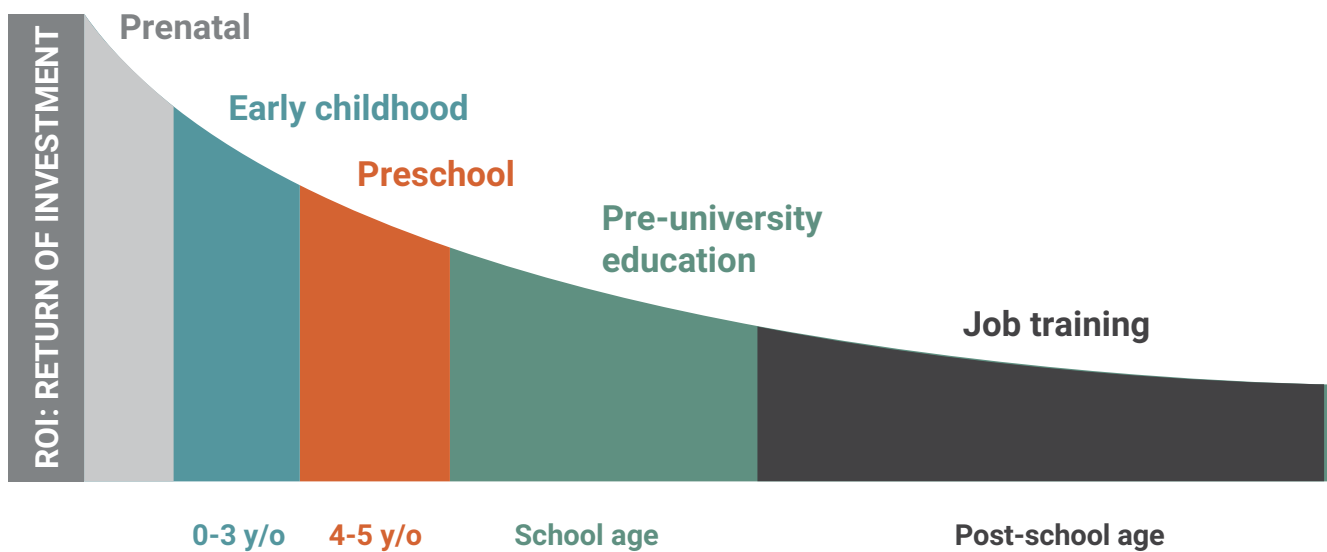
14 Toxic stress refers to a child being exposed to strong, frequent, and/or prolonged adversity – this includes physical or emotional abuse, neglect, caregiver illness, exposure to violence, and/or the accumulated burdens of family economic hardship.

academic achievement, and contribute to poorer outcomes across the life course (including an increased risk of degenerative diseases, such as diabetes, and lowering lifetime earning potentials), thus entrenching a cycle of multi-generational poverty, disadvantage, and inequity¹⁵. Strikingly, meaningful differences in outcomes between advantaged and disadvantaged children are apparent as early as nine months.¹⁶

Investing in these periods of early childhood, therefore, makes sense. It is the moment in the life course where opportunities for human development are greatest.¹⁷ 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 3). 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.¹⁸ When these benefits are monetized, the returns on investment can be enormous, with a much-cited estimate suggesting investments in nurturing care interventions can return up to 17 times the initial amount invested.¹⁹ Further, high-quality ECD programmes have been found to reduce multi-dimensional poverty and inequality. A seminal study carried out in Jamaica found that children who were part of an ECD study programme (which worked with growth-stunted children between the ages of 9-24 months in a two-year randomized controlled trial) earned 25% more as adults than the disadvantaged children in the control group (who received no treatment) – and they earned as much as their more advantaged peers.²⁰

FIGURE 3: THE HECKMAN CURVE – RETURN ON INVESTMENT: ECONOMIC IMPACT OF INVESTING IN EARLY CHILDHOOD.²¹



15 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. Available at <<https://ilifalabantwana.co.za/wp-content/uploads/2017/06/Toxic-stress-and-the-vicious-cycle-of-poverty-in-South-Africa.pdf>>

16 Ibid.

17 Heckman Equation (2021). The Heckman Curve, accessed 19.08.21. Available at <<https://heckmanequation.org/resource/the-heckman-curve/>>

18 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

19 Ibid.

20 P. Gertler, J. Heckman, R. Pinto, A. Zanolini, C. Vermeersch, S. Walker, S. M. Chang and S. Grantham-McGregor (2014). 'Labour Market Returns to an Early Stimulation Intervention in Jamaica', *Science*, 344:6187, p. 998-1001

21 Heckman Equation (2021). The Heckman Curve, accessed 19.08.21. Available at <<https://heckmanequation.org/resource/the-heckman-curve/>>

Importantly, investment in ECD can, therefore, drive progress within widespread development and 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. As the early years are the building blocks for later life, they dictate later academic success, economic productivity, responsible citizenship, lifelong health, strong communities, and the success of the next generation of parents. An investment in early childhood thus lays a strong foundation for development, increases the effectiveness of the education and health systems, improves the chances of economic productivity and growth, and contributes to more equitable societies.

Why is early childhood development important in Republika Srpska?

The ageing and shrinking population remains a large concern for the entity's economic and social development.²² These demographic trends, illustrated in Figure 4 below, are resulting in significant socio-economic and political implications. The total population has been declining every year since 2002, and, as of 2021, only 13% of the population of RS is below the age of 15.²³ This demographic situation is the result of both low birth rates and high rates of emigration. Across BiH, 25% of young people are actively looking for work outside of the country, and almost 90% would like to leave the country for a long period or even permanently.²⁴ Emigration is particularly high amongst more educated youth, which is producing a brain drain, thus threatening the quality and sustainability of their health, education, and social protection systems.²⁵

From a socio-economic standpoint, these threats to long-term development should not be understated. Republika Srpska has faced numerous setbacks, including a recession precipitated by the 2008 Global Financial Crisis, an international growth slowdown in 2012, flooding in 2014, and the more recent economically and socially detrimental impacts of the COVID-19 pandemic.²⁶ BiH is also a transit destination for many refugees and migrants. Since the beginning of 2018, more than 87,000 arrived in BiH via the Western Balkans route, with the majority moving on

to their final destinations following their arrival in BiH and only up to 2,700 refugees and migrants present in reception centres by the end of 2022 (of which more than 700 continue to live in inadequate conditions).²⁷ Furthermore, the war in Ukraine has had further negative impacts on the BiH economy, as many of its trade pathways are via other European countries that have sanctioned Russia.²⁸ This means that many of its industries that export primarily to Russia via other European countries are now facing massive production slowdowns. These crises help to explain why the average standard of living in the country is 32% of the EU-27 average in 2017, despite average GDP growth between 2015 and 2017 sitting at 3%.²⁹ This may also reflect the country's economic reliance on consumption: BiH's consumption rate is over 100% of GDP and favours recurrent spending over investment.³⁰ Unemployment rates are a particularly concerning economic metric: In the first quarter of 2022 in RS, unemployment was at 26.5% for young people between 15 and 24 years of age, and at 15.1% for women.³¹ This indicates a large disadvantage for youth and women within the labour market.³² Furthermore, gender inequality is still a large concern. Only 14.45% of seats in the National Assembly of the Republika Srpska are held by women³³, and labour force participation in RS is at 39.5% for women, compared to 57.3% for men.³⁴ Thus, there is a clear need to improve human capital outcomes and their equity. This is particularly important for BiH's bid to join the European Union: The European Commission provided an opinion that concluded that BiH does not yet sufficiently fulfil the criteria, specifically referencing the quality of institutions/democracy, the rule of law, human rights, and respect for the protection of minorities. Improvement of their institutions, as well as protection of minorities and human rights, will improve many of these socio-economic indicators through improved human capital development.

22 UNICEF (2020). Situation Analysis of Children in Bosnia and Herzegovina, (UNICEF: Sarajevo, Bosnia and Herzegovina)

23 Republika Srpska Institute of Statistics (2021). 'Population estimates 2013 – 2021', Republika Srpska Institute of Statistics, published online. Available at: https://www.rzs.rs.ba/front/article/5407/?left_mi=None&up_mi=&add=None

24 UNICEF (2020). Situation Analysis of Children in Bosnia and Herzegovina, (UNICEF: Sarajevo, Bosnia and Herzegovina)

25 Ibid.

26 Ibid.

27 European Civil Protection and Humanitarian Aid Operations, Bosnia and Herzegovina Factsheet Q4 2022. Available at https://civil-protection-humanitarian-aid.ec.europa.eu/where/europe/bosnia-and-herzegovina_en

28 Daria Sito-sucic (2022). 'Ukraine war fuels Bosnian businesses' growth, instability fears', Reuters, published online 9 March 2022. Available at <https://www.reuters.com/world/europe/ukraine-war-fuels-bosnian-businesses-growth-instability-fears-2022-03-09/>

29 UNICEF (2020). Situation Analysis of Children in Bosnia and Herzegovina, (UNICEF: Sarajevo, Bosnia and Herzegovina)

30 Ibid.

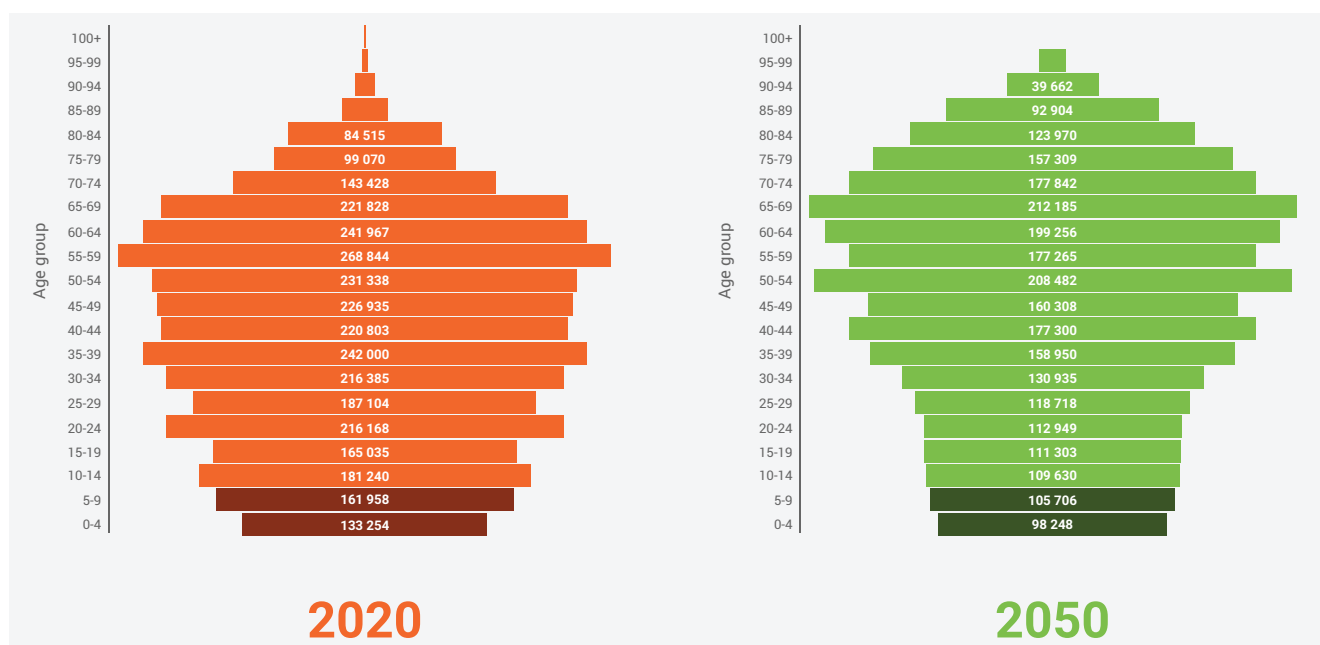
31 Ibid.

32 Ibid.

33 Edita Miftari (Unknown). 'The number of elected women in the Parliaments and Assemblies', Women's Network BiH, published online. Available at: <https://zenskamreza.ba/en/the-number-of-elected-women-in-the-parliaments-and-assemblies/>

34 Republika Srpska Institute of Statistics (2022). Labour Force Survey: 1st Quarter 2022, (Institute of Statistics: Banja Luka: Bosnia and Herzegovina)

FIGURE 4: POPULATION STRUCTURE OF BOSNIA AND HERZEGOVINA, 2020 AND 2050³⁵



ECD is particularly important given this demographic context. With fewer children and limited resources, RS must cultivate a skilled, productive young work force in order to sustain and improve economic and social conditions. The case for investing in ECD is therefore clear, as it is the basis for long-term human capital formation to ensure the best possible chance for the economic and social development of RS. Further, it may also encourage families and young people to view life prospects in the country more favourably, assist in driving down emigration rates, and potentially encourage the return of those who have already left. In 2020, around 56,250 children between 0 and 6 years of age lived in RS, a figure set to decline to around 40,676 by 2050. They must be the focus of urgent policy and investment attention.

TABLE 1: PROJECTION OF NUMBER OF CHILDREN IN REPUBLIKA SRPSKA (2020–2050)³⁸

| Year | Children (0–6 years) |
|------|----------------------|
| 2020 | 56,250 |
| 2025 | 53,899 |
| 2030 | 50,796 |
| 2035 | 47,907 |
| 2040 | 45,195 |
| 2045 | 42,834 |
| 2050 | 40,676 |

Status of early childhood development in Republika Srpska

Over the past fifteen years, progress has been made towards a conducive policy environment for the ECD ecosystem. Across RS, services for children are influenced by legislation at all three administrative levels: state, entity, and municipality/city. Legislation of particular importance at state and entity level are laid out in Table 2. Framework laws, such as the Framework Law on Preschool Education and Upbringing (2007), are intended to develop an enabling environment for positive early childhood development, with ministries at all levels obliged to harmonize existing laws in relation to preschool education and upbringing.

35 Authors. Data from Population Division (2022). World Population Prospects 2022, (United Nations Department of Economic and Social Affairs: New York, USA)
 36 UNDP (2013). Rural Development in Bosnia and Herzegovina: Myth and Reality, (UNDP: Sarajevo, Bosnia and Herzegovina)
 37 Republika Srpska Institute of Statistics (2020). Republika Srpska Population Projections, 2019-2070. Population estimates refer to Scenario S2 – with data from the official vital statistics of Republika Srpska (live births and deaths) and official data on internal migration (between Republika Srpska and the Federation of Bosnia and Herzegovina/Brčko District)

38 Ibid.

TABLE 2: LEGISLATION AND POLICIES RELATED TO ECD

| Legislation | Level | Year | Significance |
|--|-------|------|---|
| Framework Law on Preschool Education and Upbringing | BiH | 2007 | <ul style="list-style-type: none"> Recognizes the integral role of preschool as an agent of upbringing and education and provides principles and norms for the provision of preschool Article 16 makes it mandatory for children to be enrolled in preschool in the year before enrolment to primary school. Financing, duration, and programme to be determined by competent education authorities. |
| Action Plan for Children of Bosnia and Herzegovina, 2015–2018 | BiH | 2015 | <ul style="list-style-type: none"> The Action Plan determined priority objectives and measures with a view of creating the best possible living conditions for children and families. It was intended to provide a mechanism that could ensure the better implementation of the Committee on the Rights of the Child’s concluding observations. |
| Platform for the Development of Preschool Education and Care in BiH | BiH | 2017 | <ul style="list-style-type: none"> State-level strategic document to develop preschool education across BiH Adopted by the Council of Ministers in 2017 and harmonized with current EU and UN trends and standards in ECEC |
| RS Law on Social Protection | RS | 2011 | <ul style="list-style-type: none"> Law has seen important amendments in 2012, 2016, 2019, 2020 and 2022 Creates a legal definition of a child with disabilities Introduced a right to day care for children with disabilities⁴⁰ Regulates the social protection system, procedure and conditions for exercising rights, activity of social protection institutions, and independent performance of work in the field of social protection⁴¹ |
| Program for Early Childhood Development in RS | RS | 2022 | <ul style="list-style-type: none"> Defines program activities focused on all five developmental aspects through different sectors⁴² |
| RS Education Strategy 2022–2030 | RS | 2021 | <ul style="list-style-type: none"> Makes increasing availability of preschool programs a priority, including construction of more facilities and amending education by-laws as key actions to improve accessibility⁴³ Improving organization prior to the start of the school year, including creating a distribution plan for funds⁴⁴ Other priorities include raising awareness about the importance of early learning, improving inclusion of children with developmental disabilities⁴⁵ |
| Law on Child Protection | RS | 2015 | <ul style="list-style-type: none"> Key amendments made in 2018, 2019 and 2021. As of 2023 Households with a total monthly income per member between 130KM and 149.50KM, depending on the number of children in the household, are entitled to the child allowance.⁴⁶ The amount of the child allowance is 117KM for the first, second and fourth child, 169KM for the third child, and 208KM for children who exercise the right regardless of financial status and regardless of birth order |
| RS Law on Preschool Education and Upbringing | RS | 2015 | <ul style="list-style-type: none"> Regulates the preschool education of children from six months old until they start primary school⁴⁷ 2020 amendments changed the law so that ECECC can be provided in primary schools and Social Welfare Centres, as well as designated ECECC centres. |

39 UN Human Rights Office of the High Commissioner (2019). ‘Committee on the Rights of the Child says that Bosnia and Herzegovina needs to adopt a comprehensive law on children’s rights’, 11 September 2019

40 Data obtained through key informant interviews.

41 Official Gazette of Republika Srpska. Nos 37/2012, 90/2016, 94/2019, 42/2020 and 36/2022

42 UN Committee on the Rights of the Child (2019). Bosnia and Herzegovina Country Report

43 Republika Srpska (2021). Strategy for the Development of Pre-School, Primary and Secondary Education in the Republika Srpska for period 2022 – 2030, (Republika Srpska: Banja Luka, Bosnia and Herzegovina)

44 Ibid.

45 Ibid.

46 Republika Srpska Public Fund for Child Protection (2022). ‘Children’s allowance’, RS Public Fund for Children, published online. Available at: <http://www.jfdz.org/sr/page/16/dodatak-na-djetsu>

47 Official Gazette of Republika Srpska. Nos 79/2015, 63/2020 and 64/2022

As a centralized entity, policies related to ECD are mostly developed at RS level in accordance with the Constitution of Republika Srpska. However, building a conducive environment for nurturing care has been made challenging by the institutional structures in BiH, defined in the Constitution of BiH. The primary state-level body coordinating interventions relating to early childhood is the Council for Children of BiH, which is chaired by the Ministry of Human Rights and Refugees.⁴⁸ RS has had an active Council for Children for several years.⁴⁹

Opportunities to improve the quality of the legal and governance structures for ECD have emerged alongside BiH's bid to join the European Union (EU). In May 2019, the EU Commission provided an opinion that concluded that BiH did not yet sufficiently fulfil the criteria, specifically referencing the quality of institutions/democracy, the rule of law, human rights, and respect for the protection of minorities.⁵⁰ This is particularly concerning for children. Naturally, if minorities and human rights are not respected, this inequitable treatment extends to children, resulting in fewer opportunities early in life. Furthermore, weak institutions result in a challenging environment for early childhood development interventions to thrive. This is because the sector relies on multisectoral interventions: If the health, education and social protection institutions are weak, it is unlikely that they are providing accessible and adequate services for early childhood development, or that they are able to sufficiently coordinate their efforts to ensure the holistic development of children in BiH.

The European Council has granted BiH the candidate status in December 2022, following the European Commission's recommendation on the understanding that a number of steps are being taken towards the fulfilment of 14 key priorities.⁵¹ The EU is the largest provider of financial assistance to Bosnia and Herzegovina, supporting the socioeconomic development and reforms in the enlargement region, including BiH, with financial and technical assistance through the Instrument for Pre-accession Assistance (IPA).⁵² Therefore, it is promising that BiH continues to improve their institutions

in order to improve their chances of joining the EU. The continued efforts to join the EU are therefore an opportunity for the advancement of child rights in BiH, particularly as the need to adopt improved ECD legislation was cited in the EU's latest review of BiH.⁵³ As will be seen through the evidence presented in this report, many of the opportunities offered by the bid to join the EU can be grasped by investing in children, especially through Early Childhood Interventions.

Financing

Social sector budgets are centralized at RS entity level and are managed by the RS Ministry of Health and Social Welfare, the RS Ministry of Education and Culture, and the RS Public Fund for Child Protection. However, municipal and city financing represent the main funding source of ECEC and Social Welfare Centres' budgets, while the Health Insurance Fund of Republika Srpska finances the contributory health system. Expenditures in social sectors, and those targeting children in particular, are often insufficient. Even in the case of adequate funding, the outcomes for children are below targets. Looking at the case for health, education, and social protection targeting children under the age of six specifically, we see that:

- **Health care expenditures in proportion to GDP are high in RS; however, the per-capita amount is low compared to EU countries.** In 2021, RS allocated 11.3% of its GDP to the health sector: public expenditures represent 7.8% of GDP, while private ones make up for the remaining 3.5%.⁵⁴ Current health care expenditures have decreased from 13.3% of GDP in 2020 (9.7% public, 3.6% private), but increased in per-capita terms, from 1,055 BAM in 2020 to 1,181 BAM in 2021.⁵⁵ However, while health expenditures as percentage of GDP are higher than the EU average of 9.92%,⁵⁶ RS per-capita expenditures translate to just US \$658.76, which is less than one sixth of the EU average of US \$3,476.43.⁵⁷ In 2021, more than one third of total RS health

48 UNICEF (2020). Situation Analysis of Children

49 UN Committee on the Rights of the Child (2019). Bosnia and Herzegovina

50 UNICEF (2020). Situation Analysis of Children in Bosnia and Herzegovina, (UNICEF: Sarajevo, Bosnia and Herzegovina)

51 EU NEAR, December 2022. Bosnia and Herzegovina on its European path, Available at: ec.europa.eu/neighbourhood-enlargement

52 For 2021–2027, IPA III funding for the whole enlargement region is €14,162 billion, according to 5 thematic priorities: Rule of Law, Good Governance, Inclusive Growth, Green Agenda and Cross-border Cooperation. For 2014–2020, IPA II funding allocated for BiH amounted to 539.6 million EUR. In 2021, Bosnia and Herzegovina benefited from 73 million EUR under IPA III, and the Annual Action Plan 2022 adopted for BiH includes 45.5 million EUR. December 2022. Source: Bosnia and Herzegovina on its European path. Available at: ec.europa.eu/neighbourhood-enlargement

53 European Commission (2021). Commission Staff Working Document: Bosnia and Herzegovina 2021 Report. Strasbourg

54 Republika Srpska Institute of Statistics (2023). Health Statistics 2021, Annual Release. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/zdravstvo/godisnja_saopstenja/2021/Potrosnja_U_Zdravstvu_2021.pdf

55 Ibid.

56 World Bank (2019). Current health expenditure (% of GDP). Available at: <https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=BA-EU>

57 World Bank (2019). Current health expenditure per capita (current US\$). Available at: <https://data.worldbank.org/indicator/SH.XPD.CHEX.PC.CD?locations=BA-EU>

expenditure pertains to hospitals (36.8%); providers of ambulatory health care (28.2%) and retailers of medical goods (26.3%) represent the second and third largest share of expenses; while total preventive care expenditure amounts to less than 3%.⁵⁸ Further, the share of private expenditure in total expenditure on health is 30.6%, double the European average, and increased from 27.2% in 2020.⁵⁹

- **Public expenditure for preschool education and upbringing in Republika Srpska is being under-prioritized, sitting at only 0.29% of GDP in 2021.**⁶⁰

Accounting also for private expenditures and foreign funds, this figure rises to 0.42% of GDP (consisting of 70.9% public financing, 29.1% coming from private expenditures, and 0.02% from foreign funds).⁶¹ This is much lower than the average public spending on ECEC in OECD countries, of just over 0.8% of GDP.⁶² Promisingly, total public and private expenditure for formal education in RS are high, and accounted for 4.4% of GDP in 2021. Of these, 89.3% refer to public expenditure (or 4.1% of GDP), 10.3% to private, and 0.4% to foreign funds. Despite decreasing by 0.1% compared to 2020.⁶³ RS public expenditure is above neighbouring Western Balkan nations, such as Serbia and Croatia, whose education spending stand at 3.6% and 3.9% of GDP respectively.⁶⁴ However, ECEC had a share of only 9.3% of total RS expenditure for educational institutions, compared to 44.8% for primary education, 19.4% for secondary, and 26.5% for higher

education.⁶⁵ Надаље, од укупног износа издатака за формално образовање 99,3% односило се на текуће издатке, а само 0,7% на капиталне издатке.

- **Expenditure on social protection for families and children is low in RS, and sat at just 0.9% of GDP in 2021.**⁶⁶ Total social protection expenditures account for 21.7% of the RS GDP (in line with western Balkan neighbours Croatia and Serbia, which spent 24.3% and 21.9% respectively, but less than two thirds of the EU average of 31.8%⁶⁷), decreasing from 23.1% in 2020 but increasing compared to 21.4% of GDP in 2019.⁶⁸ However, out of the total amount allocated to social protection, around 75% pertains to contributory social insurance, and almost 5% is spent on administration costs.⁶⁹ Within the 21% allocated to non-contributory social assistance benefits, more than 60% (or 2.9% of GDP) is spent on war-related benefits, and only 20% on families and children, namely 0.9% of GDP.⁷⁰ This amount has remained fairly stable throughout the years, sitting at 1.0% of GDP in 2020 and 0.8% in 2019.⁷¹ Within Family/Children benefits, more than 60% are non-means tested, while only 39% are specifically targeting the most vulnerable.⁷² Therefore, there is a clear need for increased investment in social protection for children and families in RS.

58 Republika Srpska Institute of Statistics (2023). Health Statistics 2021, Annual Release. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/zdravstvo/godisnja_saopstenja/2021/Potrosnja_U_Zdravstvu_2021.pdf

59 Republika Srpska Institute of Statistics (2023). Health Statistics 2021, Annual Release. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/zdravstvo/godisnja_saopstenja/2021/Potrosnja_U_Zdravstvu_2021.pdf

60 Republika Srpska Institute of Statistics (2022). Financial statistics of education, 2021. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/obrazovanje/finansijska_statistika_obrazovanja/2021/Finansijska_statistika_obrazovanja_2021.pdf

61 Ibid.

62 OECD countries spend on average just over 0.8% of GDP on early childhood education and care, with large variations across countries. Countries spend more on pre-primary education than childcare, up to approximately 1% vs 0.5%. Source: OECD Family Database (2023). Public spending on childcare and early education. Available at: https://www.oecd.org/els/soc/PF3_1_Public_spending_on_childcare_and_early_education.pdf

63 Republika Srpska Institute of Statistics (2022). Financial statistics of education, 2021. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/obrazovanje/finansijska_statistika_obrazovanja/2021/Finansijska_statistika_obrazovanja_2021.pdf

64 World Bank (2019). Government expenditure on education, total (% of GDP). Available at: <https://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS?locations=RS-ME-HR>

65 Republika Srpska Institute of Statistics (2022). Financial statistics of education, 2021. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/obrazovanje/finansijska_statistika_obrazovanja/2021/Finansijska_statistika_obrazovanja_2021.pdf

66 Republika Srpska Institute of Statistics (2023). Integrated system of social protection 2021. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/socijalna_zastita/integrirani_sistem_socijalne_zastite/2021/Integrirani_Sistem_Socijalne_Zastite_2021.pdf

67 EuroStat (2022). Social Protection Expenditure. Available at: <https://ec.europa.eu/eurostat/web/main/data/database>

68 Republika Srpska Institute of Statistics (2023). Integrated system of social protection 2021. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/socijalna_zastita/integrirani_sistem_socijalne_zastite/2021/Integrirani_Sistem_Socijalne_Zastite_2021.pdf

69 Ibid.

70 Ibid.

71 Ibid.

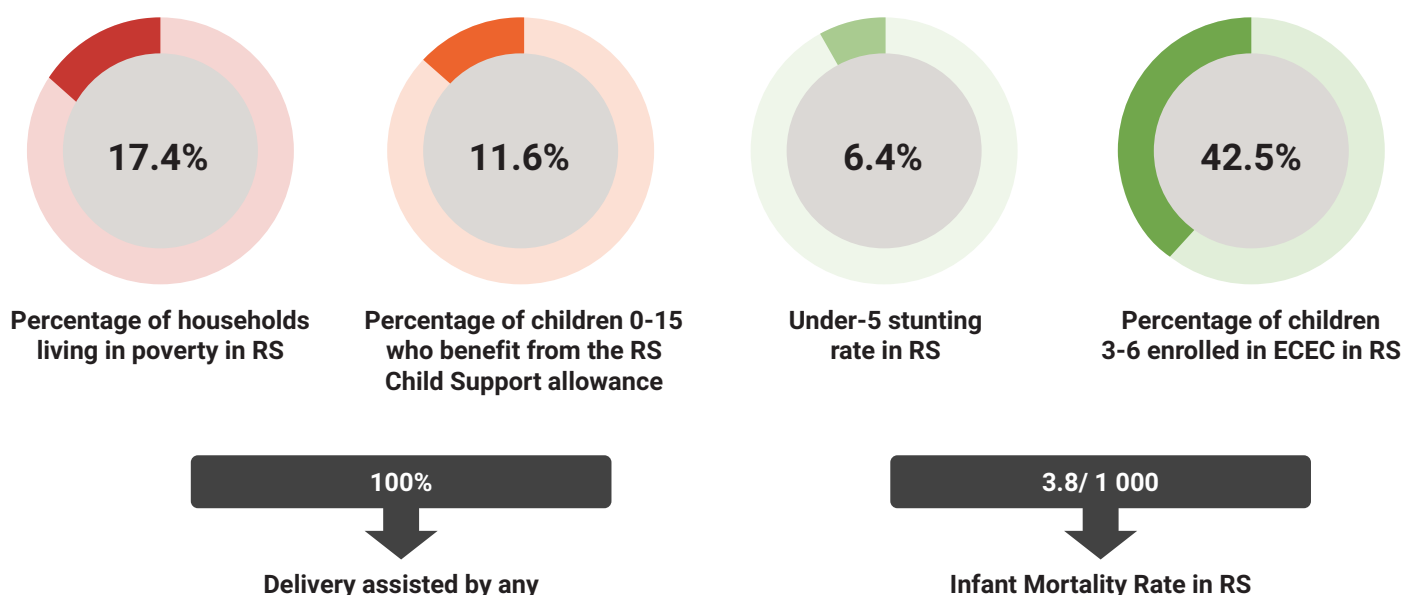
72 Ibid.

Outcomes

There are clear, significant, untapped opportunities to invest in RS's younger generations. BiH's Human Development Index (HDI) in 2019 was 0.78, placing them 73rd out of 189 countries and territories. Montenegro, a comparable Balkan nation, has a similar GDP per capita but a higher HDI of 0.829.⁷³ BiH's HDI value is also lower than the European average of 0.791.⁷⁴ A value of 0.78 indicates that a child born in BiH today is likely to grow up to be only 78% as productive as they could have been. This estimated loss in productivity is the outcome of insufficiently provided human development-enabling factors (of health, education and social protection). Specifically, in RS:

- **Health and nutrition outcomes for children are concerningly poor.** Nearly 97% of pregnant women in RS receive at least four antenatal care visits, whilst 100% deliver in health facilities.⁸¹ Infant and child mortality rates have improved and they sit at a modest 3.8 and 3.4 per 1000 live births.⁸² RS's infant mortality is slightly higher than the EU average of 3 deaths per 1000 live births, but still lower than western Balkan countries such as Albania, with an infant mortality rate of 10 deaths per 1000 live births.⁸³ However, breastfeeding and immunization coverage rates are starkly low. Further, according to a UNICEF analysis of multidimensional poverty and material deprivation, almost all children aged 0 to 4 (98%) in BiH are de-

FIGURE 5: KEY ECD STATISTICS FOR RS ^{76 77 78 79 80}



73 UNDP (2020). Human Development Report 2020: Montenegro, (UNDP: New York, USA)
 74 UNDP (2020). Human Development Report 2020: Bosnia and Herzegovina, (UNDP: New York, USA)
 75 Ibid.
 76 Agency for Statistics of Bosnia and Herzegovina (2018). Household Budget Survey in Bosnia and Herzegovina 2015. TB15, (Agency for Statistics: Sarajevo, Bosnia and Herzegovina). Available at: https://bhas.gov.ba/data/Publikacije/Bilteni/2018/CIS_01_2015_Y1_1_EN.pdf
 77 Republika Srpska Institute of Statistics (2022). Social Welfare 2022. Available at: https://www.rzs.rs.ba/static/uploads/bilteni/socijalna_zastita/Bilten_Socijalna_Zastita_2022_WEB.pdf
 78 UNICEF (2012). Multiple Indicator Cluster Survey (MICS), (UNICEF: Sarajevo, Bosnia and Herzegovina)

79 Republika Srpska Institute of Statistics (2023). Preschool institutions in the working year 2022/2023, Education statistics annual release 15/23. Available at: https://www.rzs.rs.ba/static/uploads/saopštenja/obrazovanje/predskolsko_obrazovanje/2022-2023/PredskolskoObrazovanje_2022_2023.pdf
 80 N. Karadjinovic and S. Muharemovic (2019). UNFPA Country Programme Evaluation: Bosnia and Herzegovina (2013–2018), (UNFPA: Sarajevo, Bosnia and Herzegovina)
 81 UNICEF (2012) Multiple Indicator Cluster Survey
 82 UNFPA Country Programme Evaluation: Bosnia and Herzegovina (2013–2018)
 83 EuroStat (2022). Infant Mortality Rates. Available at: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_minfind&lang=en

prived in at least one dimension, and one third (33%) in four or more dimensions at a time.⁸⁴ Concerningly, children aged 0 to 4 in RS are likely to be deprived in Nutrition (72%), Health (29%), and Child Development (58%).⁸⁵

- **Opportunities for early learning, despite major improvements, are being stifled.** Across RS, the enrolment rate in full-day or half-day preschool programmes for 3- to 6-year-olds in the 2022/23 pedagogical year sits at 42.5%⁸⁶ Out of the total number of 11,990 children over 3 years of age who have access to ECEC, 30% attend private institutions.⁸⁷ The enrolment rate reaches 47.6% for children aged 5 to 6 who attended a preschool programme prior to enrolling in primary school.⁸⁸ The enrolment rate in full-day or half-day ECEC, besides a drop during the COVID-19 pandemic, has been steadily increasing in recent years, rising from 38.5% in 2021/22,⁸⁹ 37.1% in 2019/20, and 34.2% in 2018/19.⁹⁰
- **Young children are exposed to poverty, deprivation, and toxic stress.** In RS, according to the most recent

official poverty statistics, 17.4% of households lived below the poverty line in 2015.⁹¹ Zooming into the RS Child Support allowance, the number of beneficiaries in 2021 amounts to 12,033, covering only 17,395 children, which represent just 11.6% of the child population aged 0-15 eligible for the allowance.⁹² Further, the total number of beneficiaries has been dramatically decreasing in the past four years, from 21,838 in 2018, 15,388 in 2019, and 13,381 in 2020.⁹³ While this can be explained by the rapidly declining child population in RS, it is also important to ensure that this decline is not reflective of barriers to accessing the child allowance for its most vulnerable children. Overall, child development and wellbeing in Republika Srpska seems to be compromised by the limited financial resources, as well as by a limited understanding of the importance of investment in ECD.

Further, these figures hide significant inequities in outcome between groups of young children. Children from vulnerable households (such as those with low incomes, single-parent households, households in which one or more parents/caregivers are unemployed, or Roma households), those in rural communities, and children with disabilities (CwD) are more likely to have poorer outcomes. For instance, having a disability increases the probability of falling into poverty by 18%.⁹⁴ The status of young Roma children is of particular concern. According to the 2013 census, there were over 12,000 Roma in BiH.⁹⁵ Children from these communities are three times more likely to be in poverty than other children, five times more likely to be underweight, twice as prone to stunting, and their primary school attendance is less than one third of that of the majority.⁹⁶ High birth rates in the Roma population could imply that the population of young children at risk is growing year on year, although official statistics are not available. This means that figures such as the country's HDI of 0.78 are likely much lower for these vulnerable subpopulations, whose children may therefore be far less than 78% as productive as they could have been.

84 Lucia Ferrone & Yekaterina Chzhen (2015). National Multiple Overlapping Deprivation Analysis: Child Poverty and Deprivation in Bosnia and Herzegovina. Office of Research Working Paper WP 2015-02.

85 Ibid.

86 Republika Srpska Institute of Statistics (2023). Preschool institutions in the working year 2022/2023, Education statistics annual release 15/23. Calculation based on 11,990 children over 3 years of age enrolled in ECEC in 2022/23, and an estimated population of children aged 3–6 of 28,245 in 2022 (Source: Republika Srpska Institute of Statistics (2020). Republika Srpska Population Projections, 2019-2070. Population estimates refer to Scenario S2).

87 Republika Srpska Institute of Statistics (2023). Preschool institutions in the working year 2022/2023, Education statistics annual release 15/23. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/obrazovanje/predskolsko_obrazovanje/2022-2023/PredskolskoObrazovanje_2022_2023.pdf

88 Republika Srpska Institute of Statistics (2023). Preschool institutions in the working year 2022/2023, Education statistics annual release 15/23. Calculation based on 4,432 children aged 5–6 enrolled in a condensed preparatory programme in 2022/23, and an estimated population of children 5–6 of 9,317 in 2022 (Source: Republika Srpska Institute of Statistics (2020). Republika Srpska Population Projections, 2019–2070. Population estimates refer to Scenario S2).

89 Republika Srpska Institute of Statistics (2022). Preschool Education 2021/2022 Statistical Bulletin. Calculation based on 10,839 children over 3 years of age enrolled in ECE in 2021/22, and an estimated population of children aged 3–6 of 28,177 in 2021 (Source: Republika Srpska Institute of Statistics (2022). Population estimates, 2013–2021)

90 Republika Srpska Institute of Statistics (2022). Preschool Education 2021/2022 Statistical Bulletin. Available at: https://www.rzs.rs.ba/static/uploads/bilteni/obrazovanje/predskolsko_obrazovanje/PredskolskoObrazovanje_2021_2022_WEB.pdf

91 Agency for Statistics of Bosnia and Herzegovina (2018). Household Budget Survey in Bosnia and Herzegovina 2015. TB15, (Agency for Statistics: Sarajevo, Bosnia and Herzegovina)

92 Republika Srpska Institute of Statistics (2022). Social Welfare 2022. Available at: https://www.rzs.rs.ba/static/uploads/bilteni/socijalna_zastita/Bilten_Socijalna_Zastita_2022_WEB.pdf

93 Ibid.

94 A. Numanovic (2020). 'Performances of Western Balkan economies regarding the European Pillar of Social Rights', European Centre for Social Welfare Policy and Research

95 Municipal data and Roma associations indicate that the real number is between 35,000 and 45,000.

96 UNICEF (2020). Situation Analysis of Children in Bosnia and Herzegovina. (UNICEF: Sarajevo, Bosnia and Herzegovina)

Further, there are significant challenges facing CwD.⁹⁷

These include inadequate and outdated skills amongst ECD service providers and the lack of a common definition of disability in BiH.⁹⁸ Rather than making public services and society at large more accessible for CwD, there is a widespread practice of institutionalizing young people with disabilities, something highlighted by the EU as a concern and against international convention.⁹⁹ The isolation of CwD has significant negative effects on overall development, and carries high risk of abuse. Therefore, another important aspect of ECD reform in BiH is deinstitutionalizing these young people and assisting in their integration into mainstream systems.

Finally, the outlook for child outcomes is being threatened by exogenous events and shocks.

The cost of living, globally, but particularly in Europe, has risen largely due to the war in Ukraine.¹⁰⁰ Prices of food and non-alcoholic beverages in BiH have risen by 22.7% compared to this time last year, threatening food security in the country.¹⁰¹ Higher prices are particularly problematic for the poorest households, with these households across the Balkans spending more than 60% of their budgets on food and energy.¹⁰² Moreover, trade routes that carry BiH goods such as rawhide through Italy into Russia have been disrupted by EU sanctions against Russia following the invasion.¹⁰³ Therefore, slowdowns in production may have further knock-on effects, potentially resulting in unemployment or reduced wages in addition to rising living costs. Further, emerging disasters and climate threats are also putting the future of young children at risk. Changes in the environment have increased the risk of extreme weather events, including flooding and landslides across BiH. Studies suggest that 20% of BiH is now susceptible to flooding. Significantly, 38% of all children live in municipalities/cities that are at high or very high risk for flood-

ing and landslides.¹⁰⁴ Such events lead to rises in child poverty and socio-economic downturns, and threaten the provision of nurturing care for young children, undermining local economies, household incomes, and the provision of vital health, education, and social protection services. These effects are already beginning to materialize. Flooding in 2014 impacted a quarter of the country, with 60,000 children impacted, setting poverty levels back by five years and reducing GDP by 15%.¹⁰⁵ Therefore, as over one third of children live in areas under high risk of disasters, and as children are particularly vulnerable to poverty, remedies for and prevention of climate disasters is another important component of child welfare.

THE STUDY

This investment case is based on a series of cost-benefit and cost-of-inaction analyses investigating scaling up a multi-sectoral package of ECD interventions. This package includes health and nutrition, education, and social protection interventions. This analysis identifies, quantifies, and adds all the benefits of scaling up this package of interventions; then identifies, quantifies, and subtracts all the costs associated. The difference provides valuable information to decision-makers on whether the scale-up has a net benefit and is, therefore, advisable or not.

To allow for comparability, as well as to enable the use of cost-benefit and cost-of-inaction analyses, the costs and benefits are quantified as far as possible, as well as monetized. The monetization of costs and benefits consists of estimating a monetary value using economic valuation techniques. A social discounting rate (SDR) of 3% was used throughout this report.¹⁰⁶ This is in line with the latest lending rate for BiH and the normative recommendations

97 Ibid.

98 Ibid.

99 European Commission (2021). Commission Staff Working Document: Bosnia and Herzegovina 2021 Report. (European Commission: Strasbourg, France)

100 J. Askew (2022). How is the war in Ukraine affecting the cost-of-living crisis?, Euro News. Available at: <https://www.euronews.com/my-europe/2022/05/31/how-is-the-war-in-ukraine-affecting-the-cost-of-living-crisis>

101 D. Omanovic (2022). Protesti u Mostaru: Građani iskazali nezadovoljstvo zbog vala poskupljenja u BiH. Available at: <https://www.aa.com.tr/ba/balkan/protesti-u-mostaru-gra%ca4%91ani-iskazali-nezadovoljstvo-zbog-vala-poskupljenja-u-bih/2631760#>

102 R. Record, S. Madzarevic-Sujster and T. Stucka (2022). Overlapping crises in the Western Balkans. Available at: <https://www.brookings.edu/blog/future-development/2022/05/23/overlapping-crises-in-the-western-balkans/>

103 D. Sito-sucic (2022) 'Ukraine war fuels Bosnian businesses' growth'

104 Ibid.

105 UNICEF (2020). Situation Analysis of Children in Bosnia and Herzegovina, (UNICEF: Sarajevo, Bosnia and Herzegovina)

106 A more conservative SDR of 5-6% has also been modelled to enhance the strength of this study's findings. For clarity, we include only the results from the 3% SDR estimates in this report, with results from the conservative 5-6% SDR included in a separate Excel file.

from international organizations, such as the World Bank and the Bill and Melinda Gates Foundation.¹⁰⁷

This investment case evaluates the difference in costs and benefits between a baseline ('do nothing') scenario and various scale-up scenarios. The baseline scenario is a situation in which the current level of investment and service provision is maintained. The most-recent, high-quality data available on the baseline scenario were pulled from international, state-level, and entity-level databases. Two scenarios to scale up the coverage of the health and nutrition, education, and social protection interventions are also modelled. They each assume a linear increase in coverage in line with the following trends:

- **Scale-up Scenario A (fast scale-up):** Increase baseline coverage from 2023 until reaching target coverage levels in 2030, after which the coverage level is sustained until 2052.

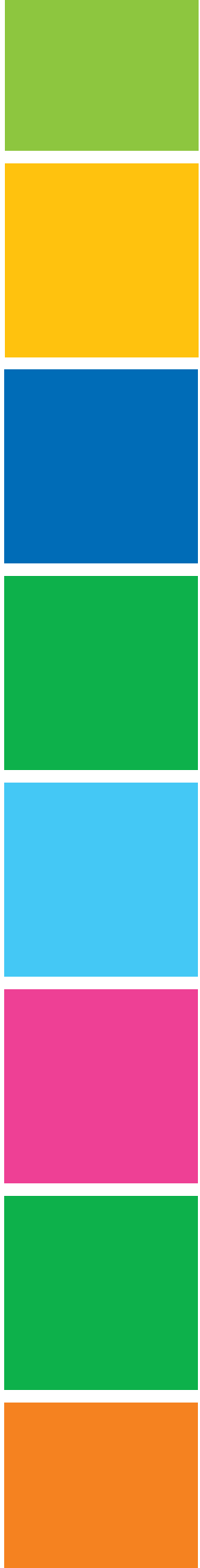
- **Scale-up Scenario B (slow scale-up):** Increase baseline coverage from 2023 until reaching target coverage levels in 2052.

Modelling of ECD interventions for each of the sub-sectors was done separately. 61 interventions were included across the health and nutrition, education, and social protection sub-sectors. Table 3 provides a snapshot of the modelling approach, including the tools used and the outcome measured for each of these sectors. The full methodology for this study, including the list of ECD interventions included, can be found in the accompanying methodological note.

TABLE 3: SUMMARY OF MODELLING METHODS

| Sector | Tool | Outcome |
|--------------------|------------------|--|
| Health & Nutrition | One Health Tool | <ul style="list-style-type: none"> • Reduced mortality for children and mothers • Reduced stunting rates • Reduced disability-adjusted life years (DALYs) lost |
| Education | ECEC Accelerator | <ul style="list-style-type: none"> • Improved educational attainment • Increase in learning-adjusted years of schooling (LAYS) • Improved future earnings |
| Social Protection | Excel | <ul style="list-style-type: none"> • Multiplier effect on the economy (impact on fiscal space through income tax and VAT) • Reduction in child poverty rates • Reduced mortality for children • Reduced stunting rates • Reduced DALYs lost • Improved educational attainment • Improved LAYS • Improved future earnings |

107 P. L. Engle, L. C. H. Fernald, H. Alderman, J. Behrman, C. O’Gara, A. Yousafzai, M. C. de Mello, M. Hidrobo, N. Ulkuer, I. Ertem, S. Iltus, Global Child Development Steering Group (2011). ‘Strategies for reducing inequalities and improving developmental outcomes for young children in low-income and middle-income countries’, *The Lancet*, 378:9700, p. 1339-53; J. Hoddinott, H. Alderman, J. R. Behrman, L. Haddad, and S. Horton (2013). ‘The economic rationale for investing in stunting reduction’, *Maternal and Child Nutrition*, 9:s2, 69-82.



**HEALTH
AND
NUTRITION**

CONTEXT

Critical interventions, including basic maternal and infant health care, nutritious feeding, and parenting programmes, can protect children from life-threatening illnesses and support their long-term health. Initiatives to support maternal and child health and nutrition have been found to have a significant impact on lifelong physical and cognitive development. Maternal stress and nutritional deprivation during pregnancy can stimulate permanent changes in fetal tissues, which are associated with abnormal structure, function, and disease in later life. Improving maternal health, therefore, improves delivery outcomes, thus avoiding premature birth and the incidence of low birth weight, ultimately reducing maternal mortality, infant mortality, and lifelong health conditions.¹⁰⁸ Supporting mothers, as well as the family more broadly, therefore, can have significant impacts on young child outcomes.

Status

Across RS, massive improvements in maternal and child healthcare have been witnessed in recent years. Maternal and child healthcare services are delivered mainly through the public primary healthcare system, free of charge. Nearly 97% of pregnant women receive at least four antenatal care visits, whilst 100% deliver in health facilities.¹⁰⁹ Provision of this care in RS has seen improvements in outcomes such as infant and child mortality rates, which now sit at a modest 3.8 and 3.4 per 1000 live births.¹¹⁰ Meanwhile, important indicators of child development are also promising, with a modest 0.4% of children in RS being recorded as underweight and 6.4% stunted.¹¹¹

However, there are a number of challenges in providing adequate maternal and child healthcare services, including an overburdened and under-funded public system. Extensive evidence suggests that the poor quality of public health services is a challenge to the fulfilment of maternal and child rights. Access to maternal and child health care remains below an adequate level. Whilst antenatal care

coverage has increased, there are concerns about the quality of care being provided.¹¹² Some evidence suggests that pregnant women are routinely not being given important support related to their pregnancy, childbirth or the post-natal period and, in some extreme cases, there are reports of disrespect and abuse by staff. In addition, some health professionals, including gynaecologists and paediatricians, can sometimes fail to give important information to their patients – patients may request information on vaccination or the value of breastfeeding, but this requires patients to know to ask the right questions. Such problems are largely attributable to a weak public health system. The number of medical staff in comparison to the population is significantly lower than the EU average, portraying pressurized human resource capabilities.¹¹³

The results of this poor public health provision, especially for maternal health care, are numerous. A number of women choose to turn to the private sector for better quality healthcare. Patronage visits, for example, which are critical to support women in breastfeeding and monitoring their child's growth, are only offered once (and, in many cases, do not happen at all). Further, some health issues that can have serious long-term implications on mothers and children alike, such as perinatal depression, remain largely neglected. For reasons such as these, a high proportion of deaths among infants in the first 28 days after birth are still being reported.¹¹⁴ The leading diseases in children under one year are preventable and include acute upper respiratory tract infections, acute bronchitis, bronchiolitis, anaemia due to iron deficiency, and skin and subcutaneous tissue infections or diseases.¹¹⁵

Socio-cultural attitudes and policies also prevent better child health and nutrition outcomes. Breastfeeding rates in RS are concerningly low, with exclusive breastfeeding up to four months sitting at just 31.7% according to the latest data.¹¹⁶ A lack of information, dominant cultural practices, and a lack of breastfeeding support programmes has led to few women opting to breastfeed, despite the strong positive benefits to the child. Further, routine services on complementary feeding are also lacking. Complementary feeding education is seldom provided, seen instead to be largely the responsibility of mothers. These poor nutritional practices are having long-term implications on child health and wellbeing. Whilst malnutrition rates are low, it is estimated that 16.4% of

108 A. Nandi, S. Bhalotra, A. B. Deolalikar and R. Laxminarayan (2017). 'The Human Capital and Productivity Benefits of Early Childhood Nutritional Interventions', in DAP Bundy et al. (eds.), *Child Adolescent Health and Development*, 3rd edition (The World Bank: Washington, D.C.)

109 UNICEF (2012) Multiple Indicator Cluster Survey

110 UNFPA Country Programme Evaluation: Bosnia and Herzegovina (2013–2018)

111 UNICEF (2012) Multiple Indicator Cluster Survey

112 Ibid.

113 UNICEF (2020). *Situation Analysis of Children in Bosnia and Herze-*

114 *govina*, (UNICEF Sarajevo, Bosnia and Herzegovina)

115 Data provided by RS Institute of Public Health.

116 Ibid.

children between 0 and 5 years of age are overweight.¹¹⁷ These rates are often linked to poor nutrition in the early years.

These attitudes, combined with distrust of the health system, have led to a dramatic and highly concerning fall in child immunization rates. Whilst it is mandatory for the population to be vaccinated against infectious diseases, basic childhood vaccination rates have dropped in recent years. This is a challenge across BiH, with the country becoming one of only three countries in Europe that is at high risk of a polio outbreak.¹¹⁸ In RS, these rates could be the result of a complex set of factors, such as accessibility of vaccines combined with vaccine hesitancy amongst the population.

Such issues are of particular concern for vulnerable groups, including the Roma. For Roma children, health and nutrition outcome indicators are far poorer, highlighting stark inequalities in their access to care and a supportive enabling environment. Infant and child mortality rates for Roma children, for example, sit far

above the average at 24 and 27 per 1,000 live births respectively.¹¹⁹ Lack of breastfeeding and supplementation with complementary foods is particularly high amongst the Roma population.¹²⁰ One of the key factors behind these poor health outcomes is the high poverty rate amongst Roma children – with Roma children being three times more likely to live in poverty than non-Roma children.¹²¹ Moreover, health care is inaccessible for many Roma people, as many Roma people do not have health insurance as a result of a lack of full-time employment, and many Roma children were not registered at birth.¹²² Other compounding factors reducing Roma access to health care include poverty and difficulty physically accessing health centres.¹²³

Policy and programming

RS has a relatively extensive array of policies and programmes seeking to improve the health and nutrition of young children and their mothers. The policies and programmes of particular note include:

TABLE 4: HEALTH AND NUTRITION – POLICY AND PROGRAMMING

| Policies and Programmes | Overview | Challenges |
|---|--|--|
| Programme for Early Childhood Development in RS 2016–2020 | <ul style="list-style-type: none"> Defines programme activities focused on all five developmental aspects through different sectors¹²⁴ | <ul style="list-style-type: none"> Lack of implementation and general societal uptake of ECD measures¹²⁵ |

117 Ibid.

118 UNICEF (2020). Situation Analysis of Children in Bosnia and Herzegovina, (UNICEF: Sarajevo, Bosnia and Herzegovina)

119 UNICEF (2012) Multiple Indicator Cluster Survey

120 UN Committee on the Rights of the Child (2019) Bosnia and Herzegovina Country Report

121 Ibid.

122 Regional Cooperation Council (2020). Roma Strategy. Available at: <https://www.rcc.int/romaintegration2020/files/admin/docs/7818b-40fcd72b2b2abc216b9e0de9a08.pdf> Kali Sara – Roma Information Centre (2020). Report on barriers in the implementation of mandatory immunization programmes for children in FBiH with a focus on Roma Children. (Kari Sara and UNICEF: Sarajevo, Bosnia and Herzegovina)

123 UN Committee on the Rights of the Child (2019). Bosnia and Herzegovina Country Report

124 UN Committee on the Rights of the Child (2019). Bosnia and Herzegovina Country Report

125 UNICEF (2020). Republika Srpska Social Inclusion Strategy for 2021–2027, (UNICEF: Sarajevo, Bosnia and Herzegovina)

| | | |
|--|--|---|
| <p>Policy of Sexual and Reproductive Health and Rights; Policy on Promotion of Sexual and Reproductive Health in RS 2012–2017</p> | <ul style="list-style-type: none"> • Seeks to increase knowledge about sexual and reproductive health, ensuring quality and accessible transition protection for every mother, safe childbirth, and comprehensive aftercare.¹²⁶ • Access to sexual and reproductive health services for adolescents had improved since the adoption of the strategy | <ul style="list-style-type: none"> • Waiting times for medical examinations are too long, causing many women to either opt out of treatment or to seek private healthcare.¹²⁷ • Users of public healthcare have also indicated that healthcare workers do not pay enough attention to the counselling aspect of treatment.¹²⁸ |
| <p>Law on Child Protection</p> | <ul style="list-style-type: none"> • Gives parents the right to a child allowance, maternity allowance, reimbursement of maternity benefits, and half-time work for children with disabilities | <ul style="list-style-type: none"> • Need to harmonize legal provisions within the Convention on the Rights of the Child and the Child Protection Law. For instance, the CRC states that protection and care should be ensured to children under 18 for their wellbeing, whereas the child allowance in RS is only available to children under 15. |
| <p>Baby-Friendly Hospital Initiative</p> | <ul style="list-style-type: none"> • All of hospitals in RS are now baby friendly. • This means that they have channels to provide post-birth support to mothers. | <ul style="list-style-type: none"> • Implementation gaps as staff in hospitals are often over-worked. |
| <p>Republika Srpska Early Childhood Development Programme 2022–2028</p> | <ul style="list-style-type: none"> • Strategic directions serve to encourage the holistic development of children from pregnancy to the age of three, and demand the engagement of all sectors in the community in order to recognize the needs of children at the earliest age and support the healthy development of children, enabling all children to reach their full potential, and to make the most of the community's resources. <p>The guiding principles of the Programme:</p> <ul style="list-style-type: none"> • The child's right to survive and thrive • The Government of Republika Srpska guarantees and protects the rights of children, and provides protection and assistance to families so that they can fully assume their responsibilities in the community. • Leave no child behind • All children have the right to health care with special sensitivity to children from vulnerable categories. • Family-centric care • Families are at the centre of nurturing care for children at the earliest age. In the period from pregnancy to the age of three, the most important support comes from intimate family members, i.e., from all primary caregivers. • Whole of society/cross-sectoral action • Cross-sectoral cooperation facilitates coordination, identifies common development goals, monitors and adjusts joint activities for the purpose of their implementation. | <ul style="list-style-type: none"> • Final adoption in 2022, however implementation is expected to be slow at local levels |
| <p>Health Insurance Law¹²⁹</p> | <ul style="list-style-type: none"> • Defining health insurance criteria and standards | |

126 Ibid.

127 UNFPA (2021). *Inquiry on Sexual and Reproductive Health and Reproductive Rights in Bosnia and Herzegovina*, (UNFPA: Sarajevo, Bosnia and Herzegovina)

128 Ibid.

129 Official Gazette of the Republika Srpska, Nos. 18/99, 51/01, 70/01, 51/03, 57/03, 17/08, 01/09 106/09, 110/16, 94/19, 44/20 and 37/22

Financing

RS allocates a relatively high proportion of its GDP to the health sector; however, compared to other EU countries, the per capita absolute amount is fairly low. In 2021, RS allocated 11.3% of its GDP to the health sector: public expenditures represent 7.8% of GDP, while private spending makes up for the remaining 3.5%.¹³⁰ Current health care expenditures have decreased from 13.3% of GDP in 2020 (9.7% public, 3.6% private), but increased in per-capita terms, from 1,055 BAM in 2020 to 1,181 BAM in 2021.¹³¹ However, while health expenditures as percentage of GDP are higher than the EU average of 9.92%¹³² RS per capita expenditures translate to just US \$658.76, which is less than one sixth of the EU average of US \$3,476.43.¹³³

The public health system across BiH is financed through the “Bismarck Model”, meaning that access to health services is provided through mandatory health insurance.

The health care system in RS is centralized under the authority of the Ministry of Health and Social Welfare of RS, the Public Health Institute, and the Health Insurance Fund, with some competences shared with the municipalities/cities.¹³⁴ There are approximately 364 health institutions registered in the Health Institution Register under the Ministry of Health and Social Welfare of RS. RS's public health insurance coverage is particularly low, at only 70%.¹³⁵ The primary source of funding for this system is from contributions from the salaries of the employed.¹³⁶

There are concerns about the equity, efficiency, and sustainability of this model. The RS public health sector has made an annual loss of 15 million KM on average.¹³⁷ The biggest burden is carried by employers, with 83.6% of public health sector revenues coming from employer contributions. RS's health financing faces certain sustainability concerns: for instance, RS's rate

of mandatory health insurance income contributions have been reduced from 12.5% in 2013 to 10.2% in 2022.^{138 139} This model also leaves public health financing vulnerable to changes in economic conditions, thus leading to an unstable financial situation.

There are also concerns about the quality of expenditure in the public health sector. Public health funds are mostly used for capital investments and certain public health and prevention programmes. For example, in 2021, more than one third of total RS health expenditure pertains to hospitals (36.8%), with ambulatory health care (28.2%) and retailers of medical goods (26.3%) representing the second and third largest share of expenses by health care provider, and less than 3% being spent on total preventative care.¹⁴⁰ This seems to indicate that there is a lack of cost-effectiveness in decision-making about the use of health resources. Moreover, the use of diagnosis-related groups (DRGs) is not incentivized in a system that focuses more on inpatient services.¹⁴¹ Further, the public health system has consistently generated fiscal deficits, owing to the high expectations from the population and insufficient resource mobilization.

Out-of-pocket (OOP) payments for health remain an important source of financing for the sector; however, they can contribute to inequities and impoverishment. In RS, the share of private expenditure in total expenditure on health is 30.6% in 2021, double the European average, and increased from 27.2% in 2020.¹⁴² These high levels of out-of-pocket payments are concerning as this usually results in the poorest households delaying and avoiding treatment due to their inability to afford the out-of-pocket costs.¹⁴³ High rates of OOP are problematic for the accessibility of ECD services, as families may avoid seeking health advice or care if they are unable to afford the cost of these services. This can result in late detection of developmental delays or disabilities, as well as a lack of knowledge among

130 Republika Srpska Institute of Statistics (2023). Health Statistics 2021, Annual Release. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/zdravstvo/godisnja_saopstenja/2021/Potrosnja_U_Zdravstvu_2021.pdf

131 Ibid.

132 World Bank (2019). Current health expenditure (% of GDP). Available at: <https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=BA-EU>

133 World Bank (2019). Current health expenditure per capita (current US\$). Available at: <https://data.worldbank.org/indicator/SH.XPD.CHEX.PC.CD?locations=BA-EU>

134 The World Bank Group (2019). Project Information Document: Bosnia Health Project. Available at: <https://documents1.worldbank.org/curated/en/848611577860521177/pdf/Concept-Project-Information-Documents-PID-Bosnia-Herzegovina-health-sector-reform-project-P171150.pdf>

135 M. Martić and O. Dukić (2017). Health Care Systems in BiH: Financing Challenges and Reform Options? Friedrich Ebert Stiftung Sarajevo

136 Ibid.

137 Ibid.

138 Global Expansion (2013). Global Employer Guide: Bosnia and Herzegovina. Available at: <https://f.hubspotusercontent30.net/hubfs/6815181/Country%20Guides/OLD/Bosnia%20and%20Herzegovina%20-%20Global%20Employer%20Guide.pdf>

139 Official Gazette of Republika Srpska. Nos 114/2017, 112/2019, 49/2021, 119/2021, 56/2022 and 132/2022

140 Republika Srpska Institute of Statistics (2023). Health Statistics 2021, Annual Release. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/zdravstvo/godisnja_saopstenja/2021/Potrosnja_U_Zdravstvu_2021.pdf

141 J. Winkelmann, Y. Litvinova and B. Rebac (2022). Health Systems in Action: Bosnia and Herzegovina, (WHO Europe: Geneva, Switzerland)

142 Republika Srpska Institute of Statistics (2023). Health Statistics 2021, Annual Release. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/zdravstvo/godisnja_saopstenja/2021/Potrosnja_U_Zdravstvu_2021.pdf

143 Ibid.

parents of best practices in terms of caring for their child’s health. Alternatively, but equally as worryingly, families may choose to take on health care costs but then be unable to pay for suitable nutrition or educational services.

It is also likely that private expenditure on healthcare is higher than that recorded in official statistics. Primary research suggests that informal, under-the-table

payments constitute an important part of the costs of accessing healthcare, even for services or population groups that are provided for free. Pregnant women, for example, frequently note that there are expectations of informal payments and gifts-in-kind if quality patronage services are to be received. Therefore, even supposedly free services may carry large informal costs on parents, which may act as a financial deterrent to seeking health care for young children.

INTERVENTIONS

Table 5 below details each intervention modelled for the health portion of this analysis. Each row specifies the existing baseline rate for the chosen intervention, as well the target rate for the intervention. The baseline rate draws from the best available data point for each intervention, with priority placed on getting recent, entity-specific infor-

mation. However, owing to data scarcity, some rates are proxies (based on international or regional estimates) or draw from older data sources (such as Multiple Indicator Cluster Survey (MICS), 2011-12). A database outlining the sources for each of these pieces of data is made available alongside this report.

TABLE 5: MODELLED INTERVENTIONS, BASELINES, AND TARGET RATES

| Intervention | Baseline Rate | Target Rate |
|---|---------------|-------------|
| Antenatal care (at least 4 visits) | 96.6% | 100% |
| Antibiotics for preterm labour | 79.1% | 100% |
| Assisted vaginal delivery | 44.8% | 100% |
| BCG vaccine | 96.8% | 100% |
| Blood transfusion (labour) | 21.4% | 100% |
| Caesarean delivery (of women in need of it) | 87.7% | 100% |
| Clean birth environment | 87.0% | 100% |
| Clean cord care | 97.0% | 100% |
| Complementary feeding – education only | 85.9% | 100% |
| Diabetes case management (as part of antenatal care coverage) | 28.0% | 100% |
| DPT vaccine | 87.9% | 100% |
| Early initiation of breastfeeding | 20.9% | 100% |
| Ectopic pregnancy case management | 71.5% | 100% |
| Exclusive breastfeeding | 31.7% | 100% |
| Fetal growth restriction detection and management | 84.0% | 100% |
| Hep B vaccine | 85.4% | 100% |
| Hib vaccine | 87.9% | 100% |
| Hypertensive disorder case management | 25.0% | 100% |
| Immediate drying and additional stimulation | 96.0% | 100% |

| | | |
|---|-------|------|
| Induction of labour (beyond 41 weeks) | 11.5% | 100% |
| Kangaroo Mother Care | 31.7% | 100% |
| Management of eclampsia (magnesium sulphate) | 92.0% | 100% |
| Manual removal of placenta | 66.4% | 100% |
| Maternal sepsis management | 79.0% | 100% |
| Measles vaccine | 83.6% | 100% |
| Neonatal resuscitation | 83.0% | 100% |
| Case management of neonatal sepsis/pneumonia | 99.7% | 100% |
| Oral antibiotics for pneumonia | 76.0% | 100% |
| Treatment of diarrhoea with oral rehydration solution (ORS) | 39.1% | 100% |
| Parenteral administration of uterotonics | 96.0% | 100% |
| Perinatal psychosocial treatment | 10.0% | 100% |
| Pneumococcal vaccine | 0.0% | 100% |
| Polio vaccine | 92.3% | 100% |
| Rotavirus vaccine | 0.0% | 100% |
| Syphilis detection and treatment (as part of antenatal care coverage) | 46.2% | 100% |
| Tetanus toxoid vaccination (as part of antenatal care coverage) | 0.0% | 100% |
| Thermal Protection | 99.6% | 100% |
| Well-baby visits (includes breastfeeding promotion and counselling for responsive caregiving) | 94.0% | 100% |

Benefits

Analysis of the direct health outcomes attributed to the scale-up of these interventions were modelled in the One Health Tool (OHT). Inputs to the tool included coverage levels of the interventions over time, evidence on the effectiveness of the interventions, and demographic data. Health outcomes, including child deaths, maternal deaths, and the years of life lived with disability were extracted from the tool and then converted into disability-adjusted life years (DALYs) averted.¹⁴⁴ For each scale-up scenario, health outcomes were compared to the baseline scenario to determine the additional health benefits accruing from the scale-up. A detailed methodology for this analysis can be found in the accompanying methodological note.



The DALYs metric is a measure that calculates the sum of the years of life lost due to premature mortality (YLLs) and years of healthy life lost due to disability (YLDs) for people living in states of less than good health resulting from a specific cause.¹⁴⁵

One DALY represents the loss of the equivalent of one year of health. In the literature it is common to monetize DALYs to understand the socio-economic cost of a health burden. Every DALY is valued at 1.5 times GDP per capita.¹⁴⁶

144 All DALYs were discounted at a rate of 3%.

145 World Health Organization (2022). 'Disability-adjusted life years (DALYs)', The Global Health Observatory, available at <<https://www.who.int/data/gho/indicator-metadata-registry/imr-details/158>>
146 Stenberg 2014

Scaling up coverage of these critical maternal and child interventions was found to have impressive benefits, in both monetary and non-monetary terms. Table 6 shows the non-monetary health benefits of implementing this ECD package, in terms of the additional child deaths averted and the DALYs averted in children, mothers and together, each year and in total. It provides these health benefits for both Scale-up Scenario A (fast scenario, where targets are hit in 2032) and Scale-up Scenario B (slow scenario, where targets are hit in 2052). Compared to the baseline scenario, an additional 133 child deaths could be averted by 2052 in Republika Srpska, and 6,039 additional DALYs could be averted in children and mothers over the same time horizon (Scale-up Scenario A). With each additional child reached by these interventions, health benefits are reaped and, even before targets are hit in 2032, an additional 42 child deaths and 1,805 DALYs could be averted. Indeed, annually, an average of 4 child

lives could be saved (2023-2052) in the faster scale-up scenario.

Intuitively, the health benefits of Scale-up Scenario B are smaller than that for Scale-up Scenario A. With targets not hit until 2052 (instead of 2032), a larger proportion of children are left uncovered by these critical health and nutrition interventions during the study’s time horizon. Compared to the baseline scenario, a significant number of child deaths and DALYs in mothers and children are still expected to be averted. Indeed, even in this slower scale-up, an additional 83 child deaths and 3,645 DALYs will be averted by 2052. Therefore, even with a less ambitious plan, the social returns of investing in ECD are evident. However, across the study’s time horizon, 60% more child deaths could be averted if Scale-up Scenario A were implemented instead of Scale-up Scenario B.

TABLE 6: ADDITIONAL CHILD DEATHS AND DALYS (IN CHILDREN, MOTHERS, AND IN TOTAL) AVERTED FOR SCALE-UP SCENARIOS A AND B, ANNUALLY AND IN TOTAL, 2022–2052

| Year | Scale-up Scenario A (Fast) | | | | Scale-up Scenario B (Slow) | | | |
|--------------|----------------------------|---------------------------|--------------------------|---------------------|----------------------------|---------------------------|--------------------------|---------------------|
| | Child deaths averted | DALYs averted in children | DALYs averted in mothers | Total DALYs averted | Child deaths averted | DALYs averted in children | DALYs averted in mothers | Total DALYs averted |
| 2023– 32 | 42 | 1,280 | 525 | 1,805 | 19 | 579 | 167 | 746 |
| 2033– 42 | 47 | 1,440 | 888 | 2,328 | 24 | 733 | 448 | 1,180 |
| 2043– 52 | 44 | 1,350 | 556 | 1,906 | 40 | 1,229 | 489 | 1,719 |
| Total | 133 | 4,070 | 1,969 | 6,039 | 83 | 2,541 | 1,104 | 3,645 |

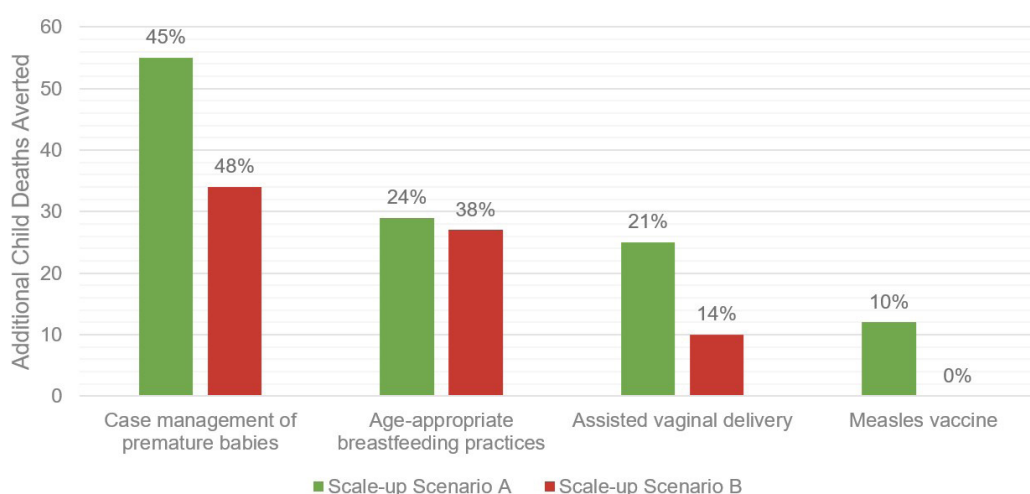
Therefore, in summary:

- For **Scale-up Scenario A**, over the shortest time horizon (up to 2032), **42 child deaths are averted** and a total of **1,805 DALYs are averted**. Over the next thirty years a total of **133 child deaths are averted** and a total of **6,039 DALYs are averted** in both mothers and children.
- **Scale-up Scenario B** reflected **fewer child deaths and DALYs averted**. In the shortest time horizon, 19 child deaths are averted and **746 DALYs are averted**. Over the next thirty years, a total of **83 child deaths are averted** and a total of **3,645 DALYs are averted** in both mothers and children.

A few interventions were particularly effective in improving the health outcomes analyzed. Children were the primary beneficiaries of scaling up these ECD interventions, accruing around 75% of all additional DALYs averted across the study time horizon. Interventions targeting neonates were particularly effective, especially in preventing deaths related to prematurity and asphyxia. These

interventions include case management of prematurity, assisted vaginal delivery, and age-appropriate breastfeeding practices. For mothers, health outcomes (especially maternal deaths) had less room for improvement. However, treatment of perinatal depression was found to be particularly effective in reducing YLDs and mortality.

FIGURE 6: ADDITIONAL CHILD DEATHS AVERTED IN SCENARIOS A AND B BY INTERVENTION, WITH THEIR PROPORTIONAL CONTRIBUTION TO TOTAL CHILD DEATHS AVERTED ANNOTATED, ACROSS TIME HORIZON 2022–2052



When monetized, these improved health outcomes for children and mothers have a high economic value. In order to get a sense of the economic gains investing in ECD could trigger, the additional health gains were transformed into monetary benefits by converting DALYs into a productivity contribution to society. This conversion followed standard practices in the literature and is detailed in the accompanying methodological note. Analysis suggests that, for Scale-up Scenario A, an average annual monetary benefit of over 5 million BAM would accrue owing to the scale-up of these health and nutrition interventions. Over the full time horizon, this equates to over 153 million BAM. For Scale-up Scenario B, this figure is slightly lower at around 3.3 million BAM annually, equivalent to just over 98 million BAM across the full study time horizon. Table 7 displays the projected economic returns in 10-year increments and in total for the study’s time horizon.

and nutrition interventions until 2052 amounts to over 153 million BAM (1.38% of GDP in RS in 2020), equivalent to an average annual monetary benefit of over 5 million BAM (0.05% of GDP in 2020).

- For **Scale-up Scenario A** in the shortest time horizon (up to 2032), the total monetized benefit of all health interventions amounts to over 37 million BAM. Benefits rise to over 57 million BAM from 2033–2042, and to over 58 million BAM from 2043–2052. Therefore, the total benefit of the fast scale-up of these health

- Scale-up Scenario B** reflected lower monetized benefits of the health intervention package. In the shortest time horizon (up to 2032), total monetized benefits sat at over 15 million BAM. Benefits rise to over 30 million BAM between 2033–2042, and to over 52 million BAM between 2043–2052. Therefore, the total benefit of the slow scale-up of these health and nutrition interventions until 2052 amounts to 98 million BAM (equivalent to 0.88% of GDP in 2020), equating to an average annual monetary benefit of 3.3 million BAM (0.03% of GDP in 2020).

TABLE 7: MONETIZATION OF BENEFITS FOR SCALE-UP SCENARIO A AND SCALE-UP SCENARIO B, IN 10-YEAR INCREMENTS AND IN TOTAL, EXPRESSED IN BAM, ADJUSTED FOR INFLATION.

| Time Horizon | Scale-up Scenario A (fast) | Scale-up Scenario B (slow) |
|--------------|----------------------------|----------------------------|
| 2023 - 2032 | 37,405,042 | 15,400,717 |
| 2033 - 2042 | 57,825,112 | 30,099,925 |
| 2043 - 2052 | 58,133,912 | 52,659,792 |
| Total | 153,364,067 | 98,160,434 |

Costs

The costs of scaling up coverage of these health and nutrition interventions in line with the different scenarios were estimated. Costing analysis was conducted through the OHT’s Lives Saved Tool (LiST) Costing Module, using validated cost data. Modelling assumed a linear increase in service delivery costs¹⁴⁷, relative to the increase in coverage, and was also modelled in line with demographic changes. A full exploration of the costing methodology, as well as the input data and sources used, can be found in the accompanying methodological note and database.

Table 8 presents the additional costs, highlighting how costs are anticipated to differ between the scale-up scenarios. Overall, Scale-up Scenario A is anticipated to lead to higher costs. On average, in the first 10 years of the scale-up, it is anticipated that an additional cost of almost 16 million BAM would be incurred 2023–2032 in Scenario A, compared to 5.4 million BAM in Scenario B. This is due to a higher number of beneficiaries and the costs of scale-up being concentrated up front (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 3%.

Over time, it is anticipated that the additional average annual cost of the scale-up will increase, owing to a higher number of beneficiaries, as well as inflation. Interestingly, however, the additional average annual costs in Scenario A are projected to fall between 2033–2042 and

2043–2052. This is a result of demographic changes: As the population under the age of six continues to fall, so will demand for ECD services. The difference for Scenario B is that these demographic shifts are offset by a continuing expansion in the coverage of services (as targets are not hit until 2052). Finally, when viewed in per capita and per child terms, costs are low. In the first 10 years of the scale-up, the additional average annual per capita cost is expected to be just 0.14 BAM for Scenario A and 0.05 for Scenario B. Meanwhile, when costs are compared to the number of children under the age of six, the additional average annual cost sits at just 2.60 BAM for Scenario A and 0.90 BAM for Scenario B. In summary:

- For **Scale-up Scenario A**, the average annual cost per period per child under six in the shortest time horizon (up to **2032**), sits at **2.63 BAM** (equivalent to just **0.02% of GDP per capita** in RS in 2021). This translates into an average annual cost per period of **0.14 BAM per capita**. This cost **rises to 4.27 BAM per child under six**, or to **0.20 BAM per capita**, when examining the period **2033–2042**, and **drops to 0.15 BAM per capita**, which equates to **3.49 BAM per child under six** when studied until **2052** (equivalent to **0.03% of GDP per capita**).
- **Scale-up Scenario B** reflected **even lower costs per child under six**. In the shortest time horizon, costs per child under six sat at just **0.90 BAM** (equivalent to **less than 0.01% of GDP per capita** in 2021). This equates to an average annual cost per period of **0.05 BAM per capita**. Costs increase to **2.19 BAM until 2042 per child under six** (or **0.10 BAM per capita**) and, in the longest time horizon (to **2052**) to **0.13 BAM per capita**, which translates to **3.02 BAM per child under six** (just **0.03% of GDP per capita**).

¹⁴⁷ These costs include drugs, supplies, labour and other recurrent costs (programme-specific human resources, training, supervision, monitoring and evaluation, infrastructure, transport, communication, media and outreach, advocacy, general programme management, community health worker training, wastage, logistics), as well as capital costs.

TABLE 8: TOTAL ADDITIONAL COSTS FOR SCALE-UP SCENARIOS A AND B, ACROSS DIFFERENT TIME HORIZONS
COSTS ARE EXPRESSED IN BAM, ADJUSTED FOR INFLATION, AND DISCOUNTED AT A RATE OF 3%.

| | Scale-up Scenario A (fast) | | | Scale-up Scenario B (slow) | | |
|---|----------------------------|-------------|-------------|----------------------------|-------------|-------------|
| | 2023 - 2032 | 2033 - 2042 | 2043 - 2052 | 2023 - 2032 | 2033 - 2042 | 2043 - 2052 |
| Average annual cost per period | 1,579,243 | 2,023,397 | 1,402,742 | 539,641 | 1,040,960 | 1,213,152 |
| Average annual cost per period, per capita | 0.14 | 0.20 | 0.15 | 0.05 | 0.10 | 0.13 |
| Average annual cost per period, per child under six | 2.63 | 4.27 | 3.49 | 0.90 | 2.19 | 3.02 |
| Total cost per period | 15,792,430 | 20,233,969 | 14,027,415 | 5,396,413 | 10,409,597 | 12,131,523 |

Cost-Effectiveness

Analysis suggests that scaling up this ECD package is cost-effective in both scale-up scenarios. Using the assessment of monetized health benefits and costs accruing owing to the scale-up of these interventions, incremental cost-effectiveness ratios (ICERs) were calculated. ICERs refer to the ratio of additional costs and additional benefits between the scale-up scenario (A or B) and the baseline scenario. Table 9 records the ICERs calculated for this study, namely the cost per child death averted and the cost per DALY averted, for both scale-up scenarios and over different time horizons. The World Health Organization (WHO) suggests that an intervention can be deemed cost-effective if the DALY averted costs are less than 1-3 times the gross domestic product (GDP) per capita. In Republika Srpska, the GDP per capita sat at 11,080 in 2021¹⁴⁸ meaning that the threshold for cost-effectiveness sits between 11,080–33,240 BAM per DALY averted. This analysis finds that:

- For **Scale-up Scenario A**, costs per DALY averted are far below the WHO threshold, making it **cost-effective**.

ive. In the shortest time horizon (up to 2032), the **cost per DALY averted** sits at **8,748 BAM** (equivalent to **78% of GDP per capita** in 2021); This falls to **8,288 BAM per DALY averted** when studied until **2052** (equivalent to **74% of GDP per capita**).

- **Scale-up Scenario B** reflected **even lower costs per DALY averted**. In the shortest time horizon, costs per DALY averted sat at just **7,237 BAM** (equivalent to **65% of GDP per capita** in 2021), this **rises slightly** in the longest time horizon (to 2052) to **7,665 BAM**.

This means that investments in this package of ECD interventions are highly cost-effective over both short- and long-term time horizons, as well as under both scale-up scenarios. These figures can be highly useful for advocacy purposes, as it is possible to compare the cost-effectiveness of ECD in comparison with other packages and interventions.

¹⁴⁸ Republika Srpska Institute of Statistics (2022). Statistical Yearbook of Republika Srpska

TABLE 9: COST-EFFECTIVENESS OF SCALING UP THE ECD PACKAGE FOR SCENARIO A AND SCENARIO B ACROSS DIFFERENT TIME HORIZONS EXPRESSED IN BAM, ADJUSTED FOR INFLATION AND DISCOUNTED AT 3%.

| Cost-effectiveness | Scale-up Scenario A (fast) | | | Scale-up Scenario B (slow) | | |
|------------------------------|----------------------------|-------------|-------------|----------------------------|-------------|-------------|
| | 2023 - 2032 | 2023 - 2042 | 2023 - 2052 | 2023 - 2032 | 2023 - 2042 | 2023 - 2052 |
| Cost per child death averted | 376,010 | 404,791 | 376,344 | 284,022 | 367,582 | 336,597 |
| Cost per DALY averted | 8,748 | 8,717 | 8,288 | 7,237 | 8,206 | 7,665 |

COST OF INACTION

Significant economic benefits will be foregone if these investments in early childhood health and nutrition are not made. Analysis of the cost of inaction (COI) indicates that failing to scale up this package of interventions could cost Republika Srpska's economy 103 million BAM between 2023 and 2052. The COI is calculated by determining the total additional economic benefit of the scale-up scenario (in comparison to the baseline), less the costs of the scale-up. Over all time horizons and both scale-up scenarios under study, the COI is concerning and highlights that a failure to invest would be a large missed opportunity for economic development. Across both scale-up scenarios, the COI is greater over longer time horizons. This is a result of more additional benefits accruing at a much faster rate than costs, translating into a greater lost opportunity over the long term. When comparing the time horizon 2023–2032 compared to 2023–2052 for Scenario B, for example, the COI is expected to be seven times higher. Further, the COI is also expected to be greater for Scale-up Scenario A, compared to Scenario B. This is a

result of the higher additional economic gains associated with the faster scale-up, as more children and mothers benefit from the interventions. Whilst additional costs are also higher for Scale-up Scenario A compared to B, the absolute costs of not investing are still expected to be higher in the faster scenario. In summary:

- For **Scale-up Scenario A**, in the shortest time horizon (up to **2032**), the **cost of inaction** sits at **over 21 million BAM** (equivalent to **0.2% of GDP** in 2020); This **rises** to over **103 million BAM** when studied until **2052** (equivalent to **0.9% of GDP**).
- Scale-up Scenario B** reflected **slightly lower costs of inaction**. In the shortest time horizon, the cost of inaction sat at over **10 million BAM** (equivalent to **0.1% of GDP** in 2020); This **rises** in the longest time horizon (to **2052**) to **over 70 million BAM** (equivalent to **0.6% of GDP** in 2020).

TABLE 10: ECONOMIC BENEFITS, COSTS, AND THE COST OF INACTION FOR SCALE-UP SCENARIOS A AND B, ACROSS DIFFERENT TIME HORIZONS

| | Scale-up Scenario A (fast) | | | Scale-up Scenario B (slow) | | |
|------------------------------------|----------------------------|-------------------|--------------------|----------------------------|-------------------|-------------------|
| | 2023 - 2032 | 2023 - 2042 | 2023 - 2052 | 2023 - 2032 | 2023 - 2042 | 2023 - 2052 |
| Total Additional Economic Benefits | 37,405,042 | 92,928,807 | 153,364,067 | 15,400,717 | 45,500,643 | 98,160,434 |
| Total Additional Costs | 15,792,430 | 36,026,399 | 50,053,815 | 5,396,413 | 15,806,010 | 27,937,533 |
| Cost of Inaction | 21,612,612 | 56,902,408 | 103,310,252 | 10,004,305 | 29,694,633 | 70,222,901 |

BENEFIT-COST RATIO

Investments in ECD will have a strong rate of return, especially over the long term. This analysis of benefits, costs, and cost-effectiveness of scaling up this package of ECD interventions fed into the development of benefit-cost ratios (BCRs). These BCRs compare the total additional monetary benefits accruing from scaling up coverage of these interventions with the total additional costs (all compared to the baseline scenario). Table 11 shows these BCRs for each scale-up scenario, they reflect an impressive case for investment.

- In **Scale-up Scenario A**, for every **1 BAM** invested, **2 BAM** are expected to be returned in socio-economic benefits between **2023 and 2032**. In longer time horizon, between **2023–2042 and 2023–2052**, the return for every **1 BAM** invested increases to **3 BAM** are expected to be returned to the economy.
- In **Scale-up Scenario B**, the BCR is even higher. For every **1 BAM** invested in the shorter time horizon

between **2023–2032 and 2023–2042**, **3 BAM** are anticipated to be returned in socio-economic benefits. Across the full study, by 2052, for every **1 BAM** invested, **4 BAM** are expected to be returned in socio-economic benefits.

The higher BCR for Scale-up Scenario B does not indicate that a slower scale-up has better returns. Instead, it is a reflection of the higher costs associated with Scale-up Scenario A, especially in the short-term. Whilst the costs are higher (and the BCR is lower) for Scale-up Scenario A, the returns on investing in a faster scale-up are still worthwhile. As highlighted in Section 2.6, the COI of not investing in these interventions was higher in Scale-up Scenario A compared to B. In Scale-up Scenario A, a greater number of children and mothers will benefit from these interventions. Whilst the rate of return might be lower for Scale-up Scenario A (compared to B), therefore, it is important to note that the net return is far higher.

These results also show that scaling up these interventions is anticipated to yield good returns over different time horizons. However, the return on investment grows over time in both scale-up scenarios as societal benefits continue to be accrued and outweigh the growth in costs.

TABLE 11: BENEFIT-COST RATIOS FOR SCALING UP ECD FOR SCENARIOS A AND B, ACROSS DIFFERENT TIME HORIZONS

| | Scale-up Scenario A (fast) | | | Scale-up Scenario B (slow) | | |
|--------------------|----------------------------|-------------|-------------|----------------------------|-------------|-------------|
| | 2023 - 2032 | 2023 - 2042 | 2023 - 2052 | 2023 - 2032 | 2023 - 2042 | 2023 - 2052 |
| Benefit-Cost Ratio | 2 | 3 | 3 | 3 | 3 | 4 |

SUMMARY AND RECOMMENDATIONS

Access to quality essential healthcare services is a basic right of all children; however, at present, significant gaps exist across RS's service provision landscape. Whilst overall indicators of maternal and child health appear strong,

delving into the available data show concerningly high levels of neonatal deaths and low coverage of essential interventions, such as immunizations, diarrheal treatments, and postpartum care. Qualitative research reflects a combination of issues contributing towards these outcomes, including a perceived poor quality of care in public facilities and financial access barriers (often related to under-the-table payments). These health system challenges must be urgently addressed. Inadequate access to these services is a threat to basic human and child rights in RS. Without improvements, there is a significant threat to the

health and wellbeing of young children and their mothers in Republika Srpska, which prevents them from surviving, thriving, and meeting their full potential.

The empirical evidence supporting the need to invest in improving the health and nutrition of young children in Republika Srpska could not be clearer. This study has sought to quantify, in monetary and non-monetary terms, the dramatic impact of these weaknesses in the health system. The results have been clear and are summarized as follows:

- Scaling up services rapidly, and ensuring that every mother and child has access to a core package of interventions, is projected to have significant positive impacts. It is estimated that **scaling up services could prevent an additional four child deaths each year**, reaching a total of **133 child deaths averted** over the next thirty years and allowing each child (and their family) the opportunity to grow up and reach their full potential.
- The impact of these interventions on morbidity are also hugely significant. In the **fastest scale-up scenario**, an additional **6,000 disability-adjusted life years lost can be averted** for mothers and children – thus vastly improving their quality of life and wellbeing, as well as their long-term productive potential.
- When monetized, these **benefits far outweigh the costs** of scaling up. The **return on investment** is a **projected factor of up to four** across the study's time horizon, meaning that for every **1 BAM spent**, up to **4 BAM** will be **returned** in socio-economic benefits.
- The **cost of inaction** (in other words, doing nothing to improve the status quo) will be colossal, having the potential to **cost RS's economy over 103 million BAM over the next thirty years**.

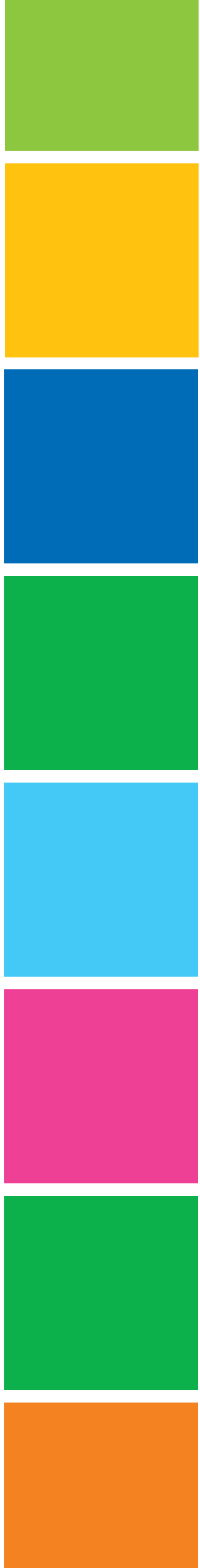
Realizing these benefits requires concerted efforts from stakeholders across the ECD ecosystem to improve health and nutrition outcomes. The findings of this analysis feed into the wider recommendations of this Investment Case (Section 5); however, some of those most relevant to the health sector include:

- **Optimize the use of public budgets for human capital development:** In a context of constrained fiscal space (especially in the light of the COVID-19 pandemic and Ukraine crisis), mobilizing the additional investments needed is expected to be challenging. Difficult decisions about how, and on whom, public expenditure will be used must be made. For this reason, such econometric evidence on the costs, cost-ef-

fectiveness, and long-term returns of spending on young children will be vital in the pursuit of increasing budgetary envelopes. Value for money will also be essential: investments must be used to maximize their impact. Sources of wastage and leakages should be identified, and analysis – like the one provided in this report on the most effective interventions in the health and nutrition space – should be used as one factor to prioritize spending.

- **Mainstream equity and inclusion:** coverage of key health and nutrition interventions for pregnant women and young children has improved in RS; however, gaps still remain. Inadequate and inequitable access to high-quality antenatal care and patronage services is a bottleneck to further progress in ECD. Populations that are currently faced with additional barriers to access for these services, such as the Roma, must continue to be targeted and interventions designed with an equity and inclusion framework in mind.
- **Support data and information collection, management and dissemination:** There is an urgent need to improve data and information services for policy-making and strategic planning. More up-to-date information on core health indicators, such as antenatal care coverage or postpartum visitations, must be made available to decision-makers. Regular data collection on a core set of ECD indicators across RS must be a priority, as should participation in a new Multiple Indicator Cluster Survey (MICs).

For more information on these considerations, amongst others, please see Section 5 – Conclusions and Recommendations of this report.



**EARLY CHILDHOOD
EDUCATION
AND CARE**

CONTEXT

Early childhood education and care services are a vital part of human capital investments. ECEC refers to intervention(s) which are intended to promote development in children prior to their entry to primary school. Formal ECEC programmes are most often provided in preschool institutions. Whilst these institutions may offer care to children from the age of six months, for the purposes of this study, ECEC only refers to programmes targeting children between the ages of three and six years. ECEC services are an important input to the provision of nurturing care. Not only do they offer children opportunities for early learning and responsive caregiving, but they can also promote good health, adequate nutrition, and safety and security.

ECEC programmes critically stimulate cognitive development, helping children to acquire crucial foundational learning skills later in life. During early childhood, more than one million new neural connections are formed every second. Evidence suggests that children who attend ECEC programmes are twice as likely to show progress in early literacy and numeracy, compared to only 20% among children not attending any ECEC programmes.¹⁴⁹ Quality ECEC has also been found to be associated with starting primary school at the right age and progressing through the educational system, making it one of the strongest predictors of a child's readiness for school.¹⁵⁰ This multitude of positive impacts of ECEC are carried into later stages of the life course and can have a dramatic effect on lifelong socio-economic outcomes in areas including health, wealth, and the formation of relationships. In recent years, studies from across the globe have tracked the impact that investments in aspects of early childhood can have in later life. One estimate suggests that increasing enrolment in pre-primary education to 50% coverage in low- and middle-income countries could result in lifetime earnings gains of US \$15–34 billion.¹⁵¹

Research from RS and BiH bears out the importance of ECEC services. Attendance in high-quality pre-primary programmes has been linked with improvements in

child development, with reports of children being better socialized and able to focus upon entry to primary school, as well as learning basic skills that promote life-long learning. Conversely, poor educational outcomes in later years have been associated with low enrolment in ECEC across the country. The Trends in International Mathematics and Science Study (TIMSS), carried out in 2019, found that primary school students were below average in their achievements on the TIMSS scale, as well as in comparison to neighbouring countries (including Serbia and Croatia). A recent study carried out in RS shows a positive correlation between attending the RS preparatory preschool programme and school readiness.¹⁵² Importantly, children in BiH who had attended two years or more of pre-primary education programmes were found to have notably improved performance in the TIMSS.¹⁵³ In the Programme for International Student Assessment (PISA), which examines 15-year-old students' proficiencies in reading, mathematics and science, fewer than half of students in BiH in 2018 attained the minimum level of proficiency in reading, 42% were at least minimally proficient in mathematics, and only 43% were minimally proficient in science.¹⁵⁴ Therefore, there is still significant progress to be made to improve RS children's basic proficiencies across a variety of academic disciplines.

Status

Enrolment in ECEC has been improving in recent years, but remains concerningly low.¹⁵⁵ In 2005, when the BiH Strategy for Preschool Education was adopted, just 8% of the total preschool-age children in BiH were enrolled¹⁵⁶ In RS, in the pedagogical year 2022/23, a total of 11,990 children between 3 and 6 years old are enrolled in full-

149 Nandi et al. (2017). 'The Human Capital and Productivity Benefits' P. Britto, S. J. Lye, K. Proulx et al. (2017). 'Nurturing care: promoting early childhood development', *The Lancet : Advancing Early Childhood Development : From Science to Scale*, 289 :10064, 91-102
150 R. K. Sayre, A. Devercelli, M. Neuman and Q. Wodon (2015). *Investing in Early Childhood Development: A Review of the World Bank's Recent Experience*, (World Bank: Washington, D.C.). Available at <<https://openknowledge.worldbank.org/bitstream/handle/10986/20715/9781464804038.pdf?sequence=1&isAllowed=y>>

152 Cvijanović, N., Mojić, D. (2020). *Institucionalna pedagoška intervencija u ranim godinama života na putu cjeloživotnog učenja [Institutional pedagogical intervention in early years in the context of early learning]*. *Croatian Journal of Education*, 22 (Sp.Ed.3), 51-69. <https://doi.org/10.15516/cje.v22i0.3909>

153 Agency for Preschool, Primary and Secondary Education (2022). *Preschool Education and Care as a Determinant of Student Achievement in Bosnia and Herzegovina in TIMSS 2019*.

154 OECD (2018). *Programme for International Student Assessment [PISA] Results from PISA 2018*, (OECD: Paris, France)

155 Preschool programmes vary, with facilities offering half- and full-day options, and condensed preparatory programmes in the year before starting school, as well as being divided between child care services (six months to three years) and ECEC services (three to six years). This study focuses solely on half- and full-day ECEC services for children three to six years of age.

156 Platform for the Development of Preschool Education in Bosnia and Herzegovina for the period 2017-2022

day or half-day preschool programmes.¹⁵⁷ Given that the estimated population for RS children aged 3–6 in 2022 is estimated around 28,245¹⁵⁸, this equates to an ECEC coverage rate of 42.5%, therefore reflecting an increase of more than five times compared to the 2005 rate. Promisingly, enrolment in full- or half-day ECEC (besides a drop during the COVID-19 pandemic) has been steadily increasing in recent years, rising from 38.5% in 2021/22, 37.1% in 2019/20, and 34.2% in 2018/19.¹⁵⁹ Further, in 2022/23, enrolment rate for children aged 5 to 6 reaches 47.6% when including those children attending the preparatory preschool programme prior to enrolling in primary school.¹⁶⁰

The private sector has fuelled growth in the ECEC sector, growing its share of the total number of facilities and children enrolled. In the work year 2021/2022, 117 preschool institutions were registered across RS, with a total of 189 facilities.¹⁶¹ The public sector accounted for 46 institutions and 101 facilities, whilst the private sector accounted for 71 institutions and 88 facilities.¹⁶² The number of institutions in the public sector fell by 44% between 2018/19 and 2021/22, and numbers have increased in the private sector by 8%.¹⁶³ However, it should be noted that, according to the RS Ministry of Education and Culture, the Republika Srpska Institute for Statistics has changed the methodology of data collection considering that previously it was taking into account the number of the preschool

organizational units, rather than preschool institutions, so the trend needs to be further analyzed. Across RS, the number of children enrolled in public preschools increased by 17% 2018/19 to 2021/22 (following a drop in 2020/21). Meanwhile, in private preschools enrolment has grown by 69% in the same time period (and even during the pandemic enrolment continued to rise). It is important to note, however, that the public sector still remains the most significant provider of ECEC: out of the total 11,990 children between 3 and 6 years of age enrolled in ECEC in 2022/23, public institutions cater for 8,393 children (70%), compared to 3,597 (30%) in the private sector.¹⁶⁴

Enrolment patterns are linked to the socio-economic and location status of the household. Children from households where one or both parents/caregivers are unemployed, or those from peripheral areas outside of the city, are more likely to struggle to gain access to ECEC. On average in RS, 82% of children enrolled in preschool come from families where both parents are employed, whilst 16% come from families with one parent employed. Children from households where both parents are unemployed constitute just 1% of the preschool population. These patterns are highly inequitable, with children from poorer and/or more vulnerable backgrounds less likely to gain access to these vital educational and developmental services, thus threatening to entrench inter-generational cycles of poverty.

Policy and Programming

Over the past fifteen years, progress has been made towards a conducive policy environment for the ECEC ecosystem. As a centralized entity, policies related to ECEC are developed at RS level. In accordance with the Constitution of Republika Srpska, education is the responsibility of RS, and the Law on Preschool Education and Upbringing prescribes provisions on supervision of the work of preschool institutions. Since 2008, ECEC was moved from the Ministry of Health and Social Protection to being under the remit of the MoEC, which is the proponent of the RS Law on Preschool Education and Upbringing adopted

157 Republika Srpska Institute of Statistics (2023). Preschool institutions in the working year 2022/2023, Education statistics annual release 15/23. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/obrazovanje/predskolsko_obrazovanje/2022-2023/PredskolskoObrazovanje_2022_2023.pdf

158 Republika Srpska Institute of Statistics (2020). Republika Srpska Population Projections, 2019–2070. Population estimates refer to Scenario S2. Available at: https://www.rzs.rs.ba/front/article/4586/?left_mi=None&up_mi=&add=None

159 Republika Srpska Institute of Statistics (2022). Preschool Education 2021/2022 Statistical Bulletin. Calculation based on children over 3 years of age enrolled in ECE, and the estimated population of children aged 3-6 provided by Republika Srpska Institute of Statistics (2022). Population estimates, 2013–2021

160 Republika Srpska Institute of Statistics (2023). Preschool institutions in the working year 2022/2023, Education statistics annual release 15/23. Calculation based on 4,432 children aged 5 to 6 enrolled in a condensed preparatory programme in 2022/23, and an estimated population of children 5–6 of 9,317 in 2022 (Source: Republika Srpska Institute of Statistics (2020). Republika Srpska Population Projections, 2019-2070. Population estimates refer to Scenario S2)

161 Republika Srpska Institute of Statistics (2022). Preschool Education 2021/2022 Statistical Bulletin. Available at: https://www.rzs.rs.ba/static/uploads/bilteni/obrazovanje/predskolsko_obrazovanje/Predskolsko_Obravanje_2021_2022_WEB.pdf

162 Ibid.

163 Ibid.

164 Republika Srpska Institute of Statistics (2023). Preschool institutions in the working year 2022/2023, Education statistics annual release 15/23. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/obrazovanje/predskolsko_obrazovanje/2022-2023/PredskolskoObrazovanje_2022_2023.pdf

by the National Assembly of Republika Srpska. The Law defines the manner of work and divided competences. At local levels, the ECEC sector is influenced by legislation at all three administrative levels: state, entity, and municipality/city. Legislation of particular importance is laid out in Table 12. Framework laws, such as the Framework Law

on Preschool Education and Upbringing (2007) and the RS Law on Preschool Education (2015) are intended to develop an enabling environment for positive early childhood development, with ministries at all levels obliged to harmonize existing laws in relation to preschools.

TABLE 12: LEGISLATION RELATED TO ECEC

| Legislation | Level | Year | Significance |
|---|-------|------|---|
| Framework Law on Preschool Education and Upbringing | BiH | 2007 | <ul style="list-style-type: none"> Recognizes the integral role of preschool as an agent of upbringing and education, and provides principles and norms for the provision of preschool Article 16 makes it mandatory for children to be enrolled in preschool in the year before enrolment to primary school. Financing, duration, and programme to be determined by competent education authorities. |
| Common Core of the Integral Developmental Programmes for Preschool Education | BiH | 2016 | <ul style="list-style-type: none"> Developed by the Agency for Preschool, Primary and Secondary Education Has the aim of creating conditions to promote personal, emotional, social and educational well-being for each child in BiH. |
| Platform for the Development of Preschool Education and Care in BiH | BiH | 2017 | <ul style="list-style-type: none"> State-level strategic document to develop preschool education across BiH Adopted by the Council of Ministers in 2017 and harmonized with current EU and UN trends and standards in ECEC. |
| RS Law on Pre-school Education and Upbringing | RS | 2015 | <ul style="list-style-type: none"> Regulates the preschool education of children from six months old until they start primary school¹⁶⁵ 2020 amendments changed the law so that ECEC can be provided in primary schools and Social Welfare Centres. |

165 Official Gazette of Republika Srpska. Nos 79/2015, 63/2020 and 64/2022

| | | | |
|---|-----------|-------------|---|
| <p>Curriculum of Pre-school Education and Care in Republika Srpska</p> | <p>RS</p> | <p>2007</p> | <ul style="list-style-type: none"> • Defines the principles behind and goals of preschool education and care, as well as methods for school and teaching work¹⁶⁶ • Outlines developmental goals across physical, socio-emotional, intellectual, communication and creativity domains for children up to six years of age¹⁶⁷ |
| <p>RS Education Strategy 2022–2030</p> | <p>RS</p> | <p>2021</p> | <ul style="list-style-type: none"> • Makes increasing availability of preschool programmes a priority, including construction of more facilities and amending education by-laws as key actions to improve accessibility¹⁶⁸ • Improving organization of the preparatory programme prior to the start of the school year, including creating a distribution plan for funds¹⁶⁹ • Other priorities include raising awareness about the importance of early learning, and improving the inclusion of children with developmental disabilities¹⁷⁰ |
| <p>RS Preschool Education Programme</p> | <p>RS</p> | <p>2022</p> | <ul style="list-style-type: none"> • Updates the Curriculum of Preschool Education and Care in the Republika Srpska from 2007 • Seeks to support increased coverage and capacity of both public and private preschools, as well as the quality of service provision¹⁷¹ • Outlines further goals related to understanding the phenomena in the world around us, sensory-perceptual experiences, and research and experimentation |

However, implementation has varied across the entity. Under the RS Law on Preschool Education and Upbringing, the MoEC has become responsible for rolling out a three-month pre-primary programme for children in the year before primary school. Attendance of preparatory preschool programmes for children between five and six is not required by law, but instead recommended by the government. Further, this programme is financed and overseen by the RS MoEC, unlike all other pre-primary programmes which are financed at municipality/city level.

Financing

Public financing of ECEC, in accordance with the RS Law on Preschool Education, comes almost exclusively from municipal/city governments. Whilst pre-primary education sits within the formal education system, its funding and service provision is dealt with at municipality and city level. Direct ECEC financial support from the RS MoEC plays a very limited role, and there is no state-level ECEC financing. Public expenditure on ECEC at city/municipal level is not ring-fenced in the entity's legislation or policy, and instead is highly dependent on local political will and budgetary room. Therefore, the public financing landscape for ECEC varies significantly across the entity, given the divergence in policy and organizational structure between different municipalities/cities. In some municipalities/cities, especially those which have more limited fiscal space or have sparser or faster ageing populations, public financial support to ECEC can be very limited. As a proportion of total municipal/city spending, ECEC constitutes less than 3% in some municipalities/cities and up to 10% in

166 Ministry of Education and Culture – Republika Srpska (2007). Curriculum of Preschool Education and Care in the Republic of Srpska. (Institute for Textbooks and Teaching Aids: East Sarajevo)

167 Ibid.

168 Republika Srpska (2021). Strategy for the Development of Pre-School, Primary and Secondary Education in the Republika Srpska for period 2022–2030

169 Ibid.

170 Ibid.

171 Available at: https://www.vladars.net/sr-SP-Cyrl/Vlada/Ministarstva/mpk/PAO/PublishingImages/Pages/Predskolsko_Obravozanje/202022.pdf

others.¹⁷² This has a commensurate impact on access and coverage, as well as the equity, of ECEC services.

Whilst it is difficult to monitor public and private expenditures on ECEC, when aggregated to RS level, it is clear that ECEC is being under-prioritized and under-funded. Public expenditure for preschool education and upbringing in Republika Srpska in 2021 amounts to only 0.29% of GDP.¹⁷³ Accounting also for private and foreign funds expenditures, this figure rises to 0.42%, with public financing representing 70.9% of the total ECEC budget, compared to 29.1% coming from private sources and only 0.02% from foreign funds.¹⁷⁴ The total budget allocated to ECEC in RS is much lower than the average public spending on ECEC in OECD countries of just over 0.8% of GDP.¹⁷⁵ Promisingly, total public and private expenditure for formal education in RS are high, and in 2021 accounted for 4.4% of GDP in 2021. Of these, 89.3% refers to public expenditure (or 4.1% of GDP), 10.3% to private, and 0.4% to foreign funds. Despite decreasing by 0.1% compared to 2020¹⁷⁶, this is above neighbouring Western Balkan nations, such as Serbia and Croatia, whose education spending stand at 3.6% and 3.9% of GDP respectively.¹⁷⁷ However, ECEC had a share of only 9.3% of total RS expenditure for educational institutions, compared to 44.8% for primary education, 19.4% for secondary, and 26.5% for higher education.¹⁷⁸ Further, of the total amount of expenditure for formal education, 99.3% referred to current expenditure, and only 0.7% to capital expenditure. Therefore, there is a clear need for increased investment in ECEC in RS.

172 Data provided by the MoEC.

173 Republika Srpska Institute of Statistics (2022). Financial statistics of education, 2021. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/obrazovanje/finansijska_statistika_obrazovanja/2021/Finansijska_statistika_obrazovanja_2021.pdf

174 Ibid.

175 OECD countries spend on average just over 0.8% of GDP on early childhood education and care, with large variations across countries. Countries spend more on pre-primary education than childcare, up to approximately 1% vs 0.5%. Source: OECD Family Database (2023). Public spending on childcare and early education. Available at: https://www.oecd.org/els/soc/PF3_1_Public_spending_on_childcare_and_early_education.pdf

176 Republika Srpska Institute of Statistics (2022). Financial statistics of education, 2021. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/obrazovanje/finansijska_statistika_obrazovanja/2021/Finansijska_statistika_obrazovanja_2021.pdf

177 World Bank (2019). Government expenditure on education, total (% of GDP). Available at: <https://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS?locations=RS-ME-HR>

178 Republika Srpska Institute of Statistics (2022). Financial statistics of education, 2021. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/obrazovanje/finansijska_statistika_obrazovanja/2021/Finansijska_statistika_obrazovanja_2021.pdf

Public financing from the entity is limited to support for children with disabilities (CwD), for children without parental care, and for provision of three-month programmes in the year prior to primary school.

The Public Fund for Child Protection of RS provides compensation for co-financing the stay in a preschool institution for children without parental care, as well as for children with developmental disabilities. Parents/caregivers shall only submit the necessary information directly to the preschool institution, who submit the documentation to the MoEC and, if approved, the Fund covers the fees for the child's attendance at preschool institutions. The Fund pays the basic rate for preschool fees; however, this does not account for the additional resources needed to provide an adequate standard of care for CwD. The MoEC, on the other hand, provides funding for the three-month programme for children in the year before primary school, which now covers 47.6% of the children aged 5-6 (in addition to children who were already benefitting from ECEC services). Coverage of this programme has expanded in recent years, but given its brevity, it is not a focus of this study. Further, less than 500,000 BAM is spent annually on ECEC by the MoEC, which is of little significance to public financing at municipal/city level.¹⁷⁹

Research suggests that public expenditure on pre-schools is skewed in favour of children enrolled in public preschools.

Whilst municipal/city governments are increasingly providing financial support to private preschools, and children enrolled within them, across the entity far lower government subsidies per child are received in the private sector compared to the public sector. Given the high rates of enrolment in the private sector, this means that households remain a significant funder of ECEC. Parental/caregiver contributions to enrol their children in pre-primary education are required in both public and private facilities, except in cases of disability. Policies to provide fee exemptions or reductions to support parents/caregivers with children from other vulnerable or low-income backgrounds depend on municipal/city policies and, in some cases, are non-existent.

179 The MoEC estimates that around 33,894,000 BAM was spent on ECEC at municipal level in 2020.

INTERVENTIONS

This study estimates the cost and benefits of increasing enrolment in ECEC. Different goals and scale-up scenarios were designed to model this pathway towards increased enrolment. Notably, this included age-specific targets, which disaggregated between enrolment of 5-year-olds from that of 3- and 4-year-olds. This was to account for the pre-existing higher rates of enrolment amongst the 5–6-year age category, as well as to align with policies to make ECEC mandatory in the year before primary school.

Therefore, the target enrolment for 3- and 4-year-olds was set at 95%, in line with EU targets. The target for 5-year-olds was set slightly higher at 100%, in line with the Platform for Development of ECEC in BiH. Further, two time horizons are considered: one that sees targets met in 2030 to align with the SDGs, and a second, where targets are met in 2052 to allow for a slower, less ambitious roll-out.

TABLE 13: ECEC SCALE-UP TARGETS BY AGE GROUP AND SCALE-UP SCENARIO

| | Scale-up Scenario A (fast) | | | Scale-up Scenario B (slow) | |
|-----------------------------|----------------------------|------|----------------|----------------------------|------|
| | Target met in 2032 | | Maintain | Target met in 2052 | |
| | Target | Year | Maintain until | Target | Year |
| 3- and 4-year-old enrolment | 95% | 2030 | 2052 | 95% | 2052 |
| 5-year-old enrolment | 100% | 2030 | 2052 | 100% | 2052 |

BENEFITS

Two forms of benefits are calculated, for which more detail on their calculations is provided in the accompanying methodological note:



As high-quality ECEC is associated with improved child development and school readiness outcomes, children who are exposed to this intervention are more likely to stay in school for longer, experience a better learning experience, and graduate from secondary school.¹⁸⁰ In this study, the impact of ECEC on years of schooling and Learning-Adjusted Years of Schooling (LAYs) are quantified. The impact of these improved educational outcomes is then monetized by estimating their contribution towards better lifelong productivity and earning potential.



The economic benefits of increased labour market participation of women, as fewer women will have to stay at home for child-care responsibilities if more young children are enrolled in preschool.

The calculations of these benefits were done using ECE Costing Tool and Excel. A variety of international literature was used to estimate the effects, all of which were adjusted for RS.

180 A. Muroga, H. T. Zaw, S. Mizunoya 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). | P. Gertler, J. Heckman and R. Pinto et al. (2021). 'Effect of the Jamaica Early Childhood Simulation Intervention on Labour Market Outcomes at age 31', World Bank Policy Research Working Paper, 9787. | N. Angrist, D. K. Evans, D. Filmer, R. Glennerster, F. Halsey Rogers and S. Sabarwal (2020). 'How to Improve Education Outcomes Most Efficiently? A comparison of 150 interventions using the new Learning-Adjusted Years of Schooling Metric', Center for Global Development, Working Paper 558

The Benefits of Improved Educational Outcomes



Universal ECEC is one of the most effective ways to improve learning outcomes for children and is associated with significant socio-economic benefits.¹⁸¹

Evidence shows that ECEC increases expected years of schooling, as well as Learning-Adjusted Years of Schooling (LAYs). At BiH level, there is a stark difference between quantity and quality of education: while the average years of schooling reach 11.7, this figure drops by almost 4 years when adjusted for learning outcomes, as the LAYs sit at only 7.8 years¹⁸². A recent study of 109 developing low- and middle-income countries found that pre-primary education was associated with an increase in the average years of education attained across a cohort.¹⁸³ It found that for every 10-percentage-point increase in pre-primary enrolment rates, an additional 0.14-year increase in education would be attained.¹⁸⁴ Further, a comparison of 150 interventions using the LAYs metric showed that ECEC had amongst the most significant impacts of any intervention under study on quantity and quality of schooling.¹⁸⁵ It suggests that beyond ECEC increasing the likelihood of children finishing school, it also increases the quality of learning that children experience. Increasing educational attainment can have a significant economic return. Studies show that increasing years of schooling is associated with an increase in productivity and lifetime earning potential.¹⁸⁶ In Bosnia and Herzegovina, it is estimated that each additional year of education is equivalent to an 8% increase in lifetime earnings.¹⁸⁷

The **LAYs** metric, designed by the World Bank in 2020, is a measure that combines quantity (number of years of schooling) and quality of schooling (measured by most recent test scores). As such, the total number of quality years of schooling may be lower than number of actual years.

The impact of scaling up ECEC services is impressive.¹⁸⁸

Whilst under the Baseline Scenario, the expected years of schooling would remain at 11.7 years per child, with scale-up this could increase to 12.8 years by 2050. Under the faster Scale-up Scenario A, the additional 1.1 years of schooling would be achieved by 2030 and then maintained. Meanwhile, under the slower Scale-up Scenario B, this increase would happen more gradually, with the expected years of schooling hitting 12.1 in 2032, 12.4 in 2042, and 12.8 in 2052 (Figure 7). Across the time horizon, this would mean that an additional 235,000 years of schooling would be realized in Scale-up Scenario A. In Scale-up Scenario B this would be lower at just under 135,000.

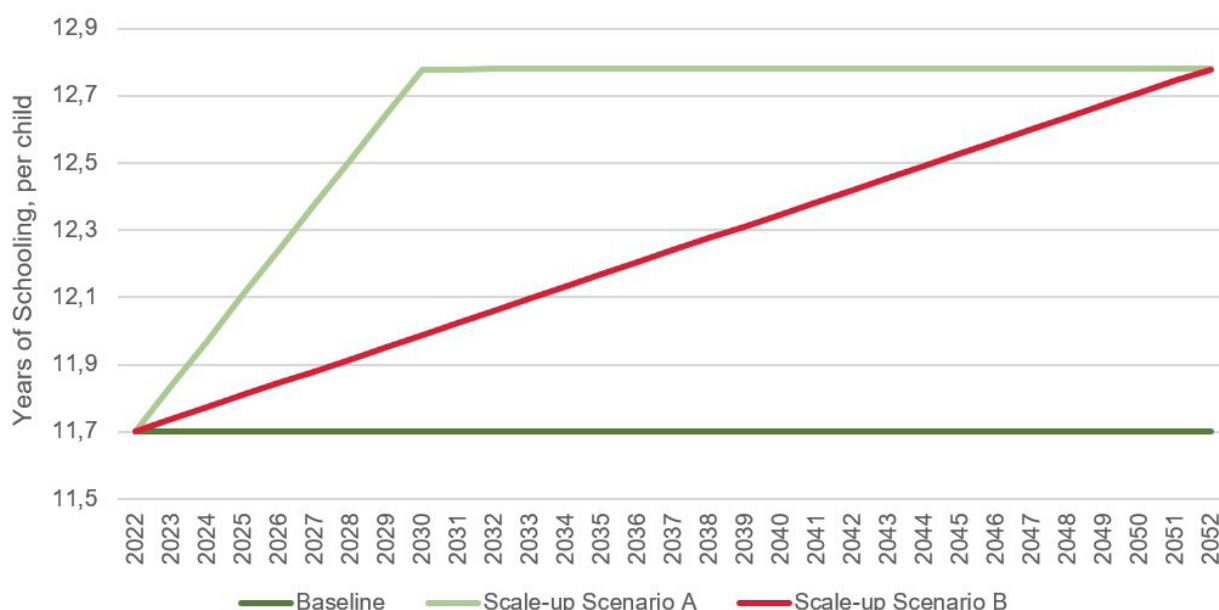
When monetized, the impact of this increase in expected educational attainment is highly impressive. The economic benefit associated is calculated as the additional years of education attained * rate of return of a year's education * lifetime earnings. The table below provides the results of these calculations. Under Scale-up Scenario A, the economic benefits of increasing years of schooling attained are exceptionally high – at 10.9 billion BAM across the study time horizon. Comparatively, Scale-up Scenario B has lower economic benefits, at 6.0 billion BAM. These benefits are still very large, and account for the vast majority of all monetized benefits associated with increasing ECEC enrolment

Notably, this table also presents the effects in the first ten years of ECEC scale-up, displaying how the gains evolve over time. In Scale-up Scenario A, benefits begin to accrue quickly, reaching 3.2 billion by 2032 alone. This is a result of the target coverage rate being hit by 2030. In contrast, Scale-up Scenario B sees these benefits accrue more slowly, as the ECEC enrolment rate incrementally increases.

- 181 UNICEF, Education Commission, The LEGO Foundation (2022). *Add Today, Multiply Tomorrow: Building an Investment Case for Early Childhood Education*, (UNICEF: New York, USA)
- 182 World Bank (2022). *Bosnia and Herzegovina Human Capital Country Brief*. Learning-adjusted years of schooling are calculated by multiplying the estimates of expected years of schooling by the ratio of the most recent harmonized test score to 625, where 625 corresponds to advanced attainment in the TIMSS test.
- 183 A. Muroga, H. T. Zaw, S. Mizunoya, H. C. Lin, M. Brossard and N. Reuge (2020). 'COVID-19: A Reason to Double Down on Investment in Pre-Primary Education', UNICEF Office of Research – Innocenti Working Paper, WP-2020-11
- 184 Ibid.
- 185 N. Angrist, D. K. Evans, D. Filmer, R. Glennerster, F. Halsey Rogets and S. Sabarwal (2020). 'How to Improve Education Outcomes Most Efficiently? A comparison of 150 interventions using the new Learning-Adjusted Years of Schooling Metric', Center for Global Development, Working Paper 558
- 186 To avoid double counting, only the additional years of schooling has been monetized. To additionally monetize the economic value of LAYs would involve us 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 monetization was taken as a result of it being more common practice in the literature. LAYs remain a new metric and, therefore, studies associating them with economic impact remains nascent.
- 187 Data cited in G. Pscharopoulos and H. A. Patrinos (2018). 'Returns to Investment in Education: A Decennial Review of the Global Literature', *Education Economics*, Vol. 26, No. 5, pp. 1-4

188 This analysis uses the findings of the A. Muroga et al. (2020) study to model the impacts on years of schooling attained.

FIGURE 7: EXPECTED YEARS OF SCHOOLING PER CHILD UNDER THE BASELINE SCENARIO, SCALE-UP SCENARIO A, AND SCALE-UP SCENARIO B



es to its target in 2052. The lower economic benefits realized in Scale-up Scenario B, compared to A, is also a result of the discounting rate. As the benefits of increasing additional years of education are not felt until much later in the study time horizon, they are discounted to create a net present value. It should be noted that, in reality, these benefits for both scale-up scenarios would be felt much later than indicated in this table – accruing across the life course of children who have benefitted from exposure to ECEC. However, in line with the literature, these benefits are accounted for in the year that the intervention has finished, rather than the year the benefit is expected to be realized. In summary:

- In the fast **Scale-up Scenario A**, the **monetary impacts of the additional years of schooling** estimated here suggest that, by **investing in ECEC**, RS stands to gain over **3.2 billion BAM** in the shortest time horizon **until 2032**, and reach over **10.9 billion BAM** over the next thirty years between **2032 and 2052**.
- The benefits would be slightly lower in **Scale-up Scenario B**. It is estimated that investing by in ECEC RS could stand to gain almost **906 million BAM** in the shortest time horizon **until 2032**, and reach over **6 billion BAM** over the next thirty years **until 2052**.

TABLE 14: MONETIZATION OF ADDITIONAL BENEFITS OF INCREASED YEARS OF SCHOOLING EXPRESSED IN BAM AND DISCOUNTED AT A RATE OF 3%.

| Scale-up Scenario A (fast) | | Scale-up Scenario B (slow) | |
|----------------------------|----------------|----------------------------|---------------|
| 2023 - 2032 | 2023 - 2032 | 2023 - 2032 | 2023 - 2032 |
| 3,216,112,364 | 10,930,269,451 | 905,954,452 | 6,031,566,315 |

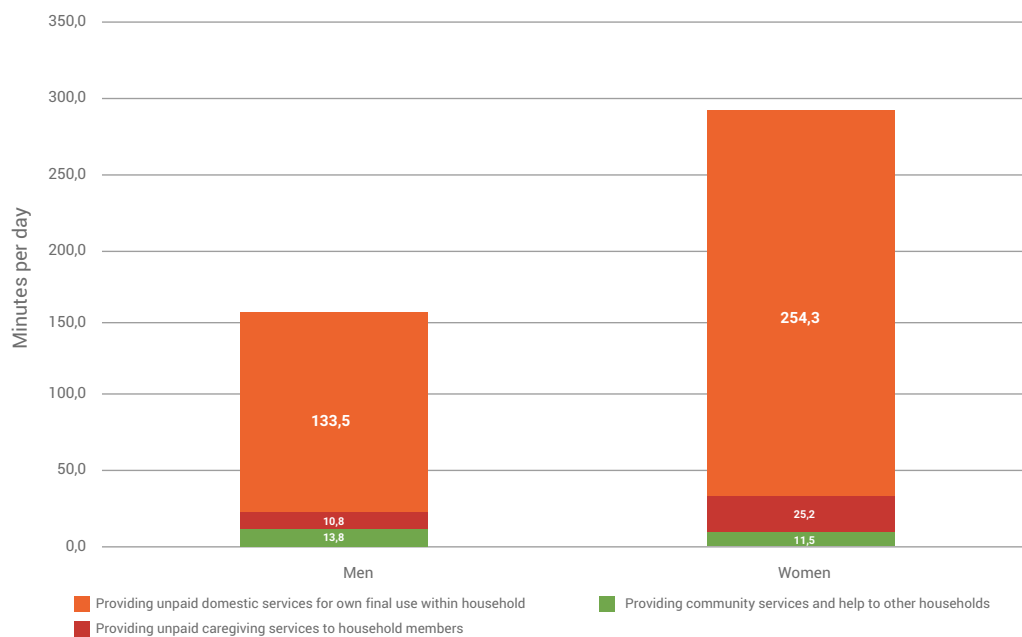
Increased Female Labour Force Participation

The provision of ECEC services frees up time for caregivers (usually women). Studies show that this ‘freed up’ time can be significant and, often, can be put towards income-generating activities.¹⁸⁹ Enrolling children in ECEC would be expected to have a sizeable time-saving impact for caregivers in RS under both scale-up scenarios. Evidence from the International Labour Organization (ILO) suggests that the labour market participation of women with young children is lower than for women without young children.¹⁹⁰ Using data on current female labour market participation in RS,¹⁹¹ the potential impact of ECEC on labour market participation of women with young children was modelled.

Importantly, women stand to particularly benefit from these time savings for caregivers associated with

improved ECEC coverage. Studies show that women shoulder the majority of unpaid care work, including care for young children.¹⁹² AAnalysis of time-use studies in six Eastern European countries¹⁹³ indicates that women undertake nearly double the unpaid care work each day that men undertake, equivalent to an additional 2 hours per day (Figure 8).¹⁹⁴ For unpaid care work related to caregiving services to household members (including children), this disparity is even higher, with women spending 90% more time on caregiving within the household in comparison to men. For this reason, women stand to benefit disproportionately from improved access to ECEC services, including in improving their ability to participate in income-generating activities.

FIGURE 8: UNPAID CARE WORK UNDERTAKEN BY MEN AND WOMEN IN EASTERN EUROPE, BY TYPE OF UNPAID CARE WORK, IN MINUTES PER 24-HOUR DAY.¹⁹⁵



189 A. Hojman and F. Lopez Boo (2022). ‘Public childcare benefits children and mothers: Evidence from a nationwide experiment in a developing country’, *Journal of Public Economics*, 212, 104686. | G. Fink, D. C. McCoy, H. I. Hatamleh (2017). ‘Economic Implications of Investing in Early Childhood Care and Education in Jordan’, Queen Rania Foundation, Working Paper

190 ILO (2021). *Supporting Women’s Employment through Institutional Collaboration on Early Childhood Care and Education*

191 Republika Srpska Institute of Statistics (2022). *Labour Force Survey 2021*. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/anketa_o_radnoj_snazi/2021/ARS_2021.pdf

192 L. Addati, U. Cattaneo and E. Pozzan (2022). *Care at Work: Investing in Care Leave and Services for a More Gender Equal World of Work*, (Geneva: ILO). | G. Azcona, A. Bhatt, W. Cole, R. Gammarano and S. Kapsos (2020). *The Impact of Marriage and Children on Labour Market Participation*, (Geneva: ILO and UN Women)

193 Romania, Hungary, Belarus, Poland, Bulgaria and Moldova

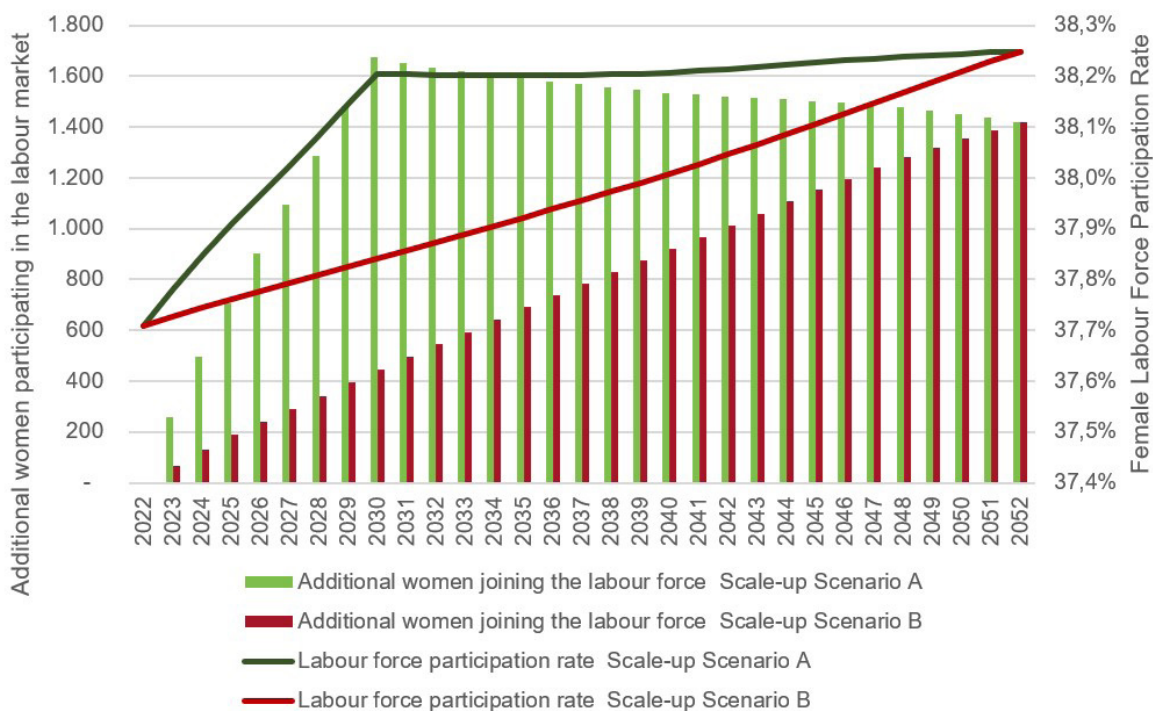
194 J. Charmes (2019). *Unpaid Care Work and the Labour Market: An analysis of time use data based on the latest World Compilation of Time-use Surveys*, (Geneva: ILO)

195 Authors. Data from J. Charmes (2019). *Unpaid Care Work and the Labour Market: An analysis of time use data based on the latest World Compilation of Time-use Surveys*, (Geneva: ILO)

Female labour force participation would likely be impacted by caregiver time saved owing to ECEC. Assuming that access to ECEC means that women with children under the age of six are able to participate in the labour force at a rate commensurate of those without, the impact of this intervention could be significant (Figure 9). In Scale-up Scenario A, increasing access to ECEC could result in a 0.5-percentage-point increase in the female labour force

participation rate, from 37.7% in 2022 to 38.2% by 2029. In Scale-up Scenario B, this impact would be felt much later – with the female labour force participation rate increasing to 38.2% in 2052. This would result in an additional 1,341 women on average per year in the labour force in Scale-up Scenario A (2022-2052 average), or 765 women on average per year in Scale-up Scenario B.

FIGURE 9: ADDITIONAL WOMEN PARTICIPATING IN THE LABOUR MARKET AND LABOUR FORCE PARTICIPATION RATE, ANNUALLY, SCALE-UP SCENARIO A AND SCALE-UP SCENARIO B



This increased female labour force participation could translate into a significant economic opportunity for caregivers. Assuming a conservative wage-earning estimate for these additional women joining the labour market,¹⁹⁶ the economic benefit of expanding ECEC was calculated. The results of these calculations are displayed in the table below. Scale-up Scenario A sees a greater incidence of economic benefit, at over 170 million BAM

across the study time horizon and over 50 million BAM by 2032 alone. In Scale-up Scenario B, these economic benefits are also significant – over 94 million BAM across the study time horizon, and over 14 million BAM by 2032. These large benefits are particularly important as they are reaped directly, and immediately, by families and caregivers. The subsequent increase in household incomes as a result further enhance child development – for example, through investing in more nutritious foods, and reducing exposure to toxic stress resulting from low household incomes. Further, these additional incomes could also be pivoted towards supporting household contributions towards the provision of ECEC, if these services cannot be fully resourced through public financing. In summary:

¹⁹⁶ The conservative wage-earning estimate is calculated as 0.4 x GNI per capita. The GNI per capita is used because it is more reflective of wages/salaries than GDP per capita. Studies looking at long-term impacts of health interventions, for example, use an assumption that 90% of a conservative wage will be realized by children who have been exposed to them (Hoddinott et al. 2013). In this study, half of this is used as an estimate, as it is assumed that caregivers (usually mothers) will more likely take on shorter-term, thus, lower-paid work in comparison to the BiH average.

- In the fast **Scale-up Scenario A**, the estimated **economic benefits of increased female labour force participation** suggest that, by **investing in ECEC**, RS stands to gain over **50 million BAM** by **2032**, and over **171 million BAM** between **2023–2052**.
- The benefits would be slightly lower in **Scale-up Scenario B**. It is estimated that, by investing in ECEC, RS could stand to gain over **14 million BAM in the next 10 years** and nearly **95 million BAM in the next 30 years**.

TABLE 15: MONETIZATION OF ADDITIONAL BENEFIT OF INCREASED FEMALE LABOUR FORCE PARTICIPATION IN SCALE-UP SCENARIO A AND SCALE-UP SCENARIO B EXPRESSED IN BAM AND DISCOUNTED AT A RATE OF 3%.

| Scale-up Scenario A (fast) | | Scale-up Scenario B (slow) | |
|----------------------------|-------------|----------------------------|------------|
| 2022–2032 | 2022–2052 | 2022–2032 | 2022–2052 |
| 50,189,801 | 171,145,394 | 14,101,593 | 94,723,705 |

COSTS

The costs of scaling up the provision of ECEC have been estimated. These estimates were developed on UNICEF's ECEC Accelerator tool, which was adapted for RS. The key inputs were baseline enrolment rates, population estimates, the number of teachers and other employees, baseline salary data, and baseline government expenditure data – all of which were sourced at RS level and validated. It should be noted that preschool teacher salaries grow in our projections at a faster rate than inflation. Preschool teacher salaries have been increased to the level of primary school teachers. This modelling decision was taken to reflect the current under-payment and lack of incentives for preschool teachers in the sector. A full exploration of the costing methodology, as well as the input data and sources used, can be found in the accompanying methodological note and database.¹⁹⁷

The additional costs of these expansions are presented in the table below, according to the different scale-up scenarios. Overall, Scale-up Scenario A is more expensive. In the first ten years of scale-up, it is expected that an additional 472 million BAM are required to meet the enrolment targets by 2032. This compares to just over 138 million BAM in the slow Scale-up Scenario (B), where enrolment targets are only expected to be reached by 2052, and costs are thus spread out more evenly across the next two decades. These large differences are primarily due to the speed of the scale-up: the faster scenario (A) has greater immediate costs, which have a higher present value than costs that will be incurred later and will benefit a larger number of children across the study period.

Over time, the annual average cost is expected to grow. This is owing to a larger number of children being enrolled in preschool, and as a result of inflation. Viewed in terms of annual average costs per capita and per child between three and six years old, cost estimates are more digestible. In the first ten years of Scale-up Scenario A, 1,701 BAM per child (aged 3–6 years) are needed to meet the targets. In Scale-up Scenario B, this falls to just 497 BAM. By the period 2043–52, this would increase to 2,098 BAM in Scale-up Scenario A, compared to 1,804 BAM in Scale-up Scenario B. These costs can be incurred by both the public and private sector, depending on the financing model developed by the government. In summary:

¹⁹⁷ Уз раније утврђене циљеве уписа, постављени су и бројни други циљеви, а то су: рад на омјеру ученика и наставника од 12 ученика по наставнику, те усмјеравање на бољу расподелу између текуће и капиталне потрошње – у складу са смјерницама Уницефа. У свим ентитетима садашња потрошња заузима превелики удио укупне потрошње за образовање. Као таква, ова активност моделирања процјенила је да ће прерасподјела потрошње досегнути 80:20 омјер текуће потрошње и капиталне потрошње, у складу са смјерницама Уницефа (UNICEF ESARO, 2019. Кратке смјернице буџета за образовање.)

- For **Scale-up Scenario A**, the **average annual costs per period per child (3–6 years)** in the nearest time horizon (up to 2032), sits at **1,701 BAM**. This is equivalent to **47 million BAM per year on average** between 2023 and 2032 (**0.4% of GDP** of RS in 2020). The costs increase to **2,319 BAM** per child aged 3–6 between the **2033-2042** time period, equivalent to an average annual cost of over **62 million BAM (0.56% of GDP** of RS), and in the **2043-2052** time period decrease to **2,098 BAM** per child aged 3–6, which translates to an average annual cost of **55 million BAM per year** (or **0.5% of GDP** of RS in 2020).
- Scale-up Scenario B** reflects **lower costs per child** (3–6 years). In the shortest time horizon, up to **2032**, the cost per child under six sits at **497 BAM**. This **rises to 1,209 BAM by 2042** and, in the longest time horizon (to **2052**) to **1,804 BAM**. This translates to an **average annual expenditure** of over **13 million BAM** between **2023 and 2032** (0.12% of RS GDP in 2020), **32 million BAM per year** between 2033 and 2022 (**0.29% of RS GDP** in 2020), and nearly **48 million BAM** per year between **2043 and 2052** (equivalent to **0.42% of GDP**).

TABLE 16: TOTAL ADDITIONAL COSTS FOR SCALE-UP SCENARIOS A AND B, ACROSS DIFFERENT TIME HORIZONS
 COSTS ARE EXPRESSED IN BAM, ADJUSTED FOR INFLATION, AND DISCOUNTED AT A RATE OF 3%.

| | Scale-up Scenario A (fast) | | | Scale-up Scenario B (slow) | | |
|---|----------------------------|-------------|-------------|----------------------------|-------------|-------------|
| | 2023 - 2032 | 2033 - 2042 | 2043 - 2052 | 2023 -2032 | 2033 -2042 | 2043 -2052 |
| Average annual cost per period | 47,285,271 | 62,924,725 | 55,730,499 | 13,827,990 | 32,808,822 | 47,912,406 |
| Average annual cost per period, per child (3–6 years old) | 1,701 | 2,319 | 2,098 | 497 | 1,209 | 1,804 |
| Total incremental discounted cost per period | 472,852,713 | 629,247,252 | 557,304,993 | 138,279,903 | 328,088,224 | 479,124,061 |

COST OF INACTION

Should these investments in scaling up ECEC not be made, substantial economic benefits will be foregone. The cost-of-inaction (COI) is a metric that enables quantifying the gains foregone from not investing in ECEC, and it is calculated by determining the total additional economic benefit of each scale-up scenario and subtracting the costs of that scale-up.

- In **Scale-up Scenario A**, the COI estimated here suggests that **not investing in ECEC** could **cost RS over 2.7 billion BAM** in the shortest time horizon (**2023–2032**), and reach over **9.4 billion BAM** when studied until **2052**.

- Scale-up Scenario B** reflected **slightly lower costs of inaction**. It is estimated that not investing in ECEC could **cost RS over 782 million BAM** in the **next ten years**, and **5 billion BAM** in the longest time horizon (to 2052).

Across all time horizons and both scale-up scenarios, the COI is large and shows that not investing in ECEC would be a significant missed opportunity for development. Across both scenarios, the COI grows the longer the time horizon considered. This is because additional possible benefits begin to accrue at a faster rate than costs, translating into a greater lost opportunity over the long term. In other words, while costs may be higher in the short term, in the long run, benefits grow at a much larger rate.

TABLE 17: ECONOMIC BENEFITS, COSTS, AND THE COST OF INACTION FOR SCALE-UP SCENARIOS A AND B, ACROSS DIFFERENT TIME HORIZONS EXPRESSED IN MILLIONS OF BAM AND DISCOUNTED AT 3%.

| | Scale-up Scenario A (fast) | | Scale-up Scenario B (slow) | |
|------------------------------------|----------------------------|-------------|----------------------------|-------------|
| | 2023 - 2032 | 2023 - 2052 | 2023 - 2032 | 2023 - 2052 |
| Total Additional Economic Benefits | 3,266 | 11,101 | 920 | 6,126 |
| Total Additional Costs | 473 | 1,659 | 138 | 945 |
| Cost of Inaction | 2,793 | 9,442 | 782 | 5,180 |

BENEFIT-COST RATIO

Investments in ECEC have a strong, positive return on investment – a rate that is even larger over the long term.

The above analysis of benefits and costs of expanding access to ECEC interventions build into the calculation of benefit-cost ratios (BCRs). These BCRs compare the total additional monetary benefits accruing from expanding ECEC coverage with the total additional costs (all compared to the baseline scenario). The table below shows these BCRs for each scale-up scenario. Scale-up Scenario B has a lower rate of return on investment, as lower coverage of ECEC is achieved in comparison to Scale-up Scenario A. In summary:

- In **Scale-up Scenario A**, for every **1 BAM** invested in the scale up of ECEC coverage, **6.7 BAM** are anticipated to be returned in socio-economic benefits between **2023 and 2052**.
- In **Scale-up Scenario B**, for every **1 BAM** invested in ECEC, **6.5 BAM** are expected to be returned in socio-economic benefits between **2023 and 2052**.

TABLE 18: BENEFIT-COST RATIOS FOR SCALING UP ECEC FOR SCENARIOS A AND B, ACROSS DIFFERENT TIME HORIZONS

| | Scale-up Scenario A (fast) | Scale-up Scenario B (slow) |
|--------------------|----------------------------|----------------------------|
| | 2022 - 2052 | 2022 - 2052 |
| Benefit-Cost Ratio | 6.7 | 6.5 |

SUMMARY AND RECOMMENDATIONS

Investing in expanding access to ECEC is crucial for the long-term development of children, yielding substantial economic gains in the long run. Although expanding access to ECEC is costly in the short-term, particularly in Scale-up Scenario A where targets are set for 2030, the long-term gains are significant and outweigh the anticipated costs. Scaling up coverage of ECEC creates economic benefits in terms of increased opportunities for labour market participation of mothers caring for young children, productivity gains, and GDP and fiscal gains due to an improved quality of lifelong learning that arises from completing a full cycle of ECEC.

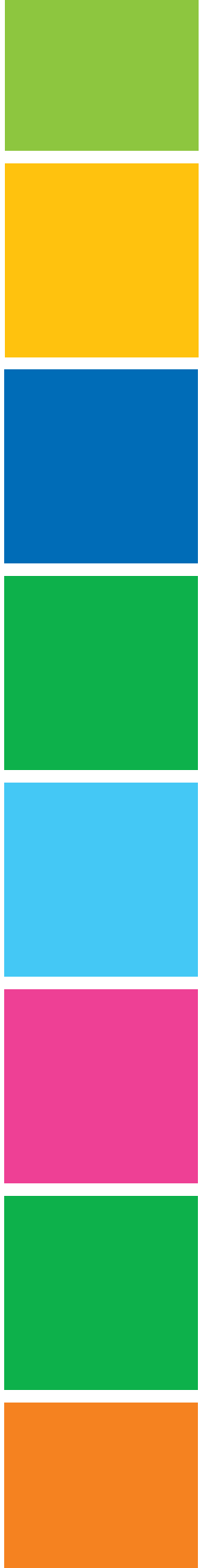
This study advocates for a faster expansion of ECEC. In order to capitalize on possible gains in the long term (and given the demographic trends in RS), it is important that expanding ECEC occur now. It is expected that the gains from expanding ECEC more rapidly (under Scale-up Scenario A) will grow at a rate faster than is seen in Scale-up Scenario B. Thus, whilst the costs are higher, the potential benefits for investing in scaled-up ECEC as quickly as possible will yield the greatest returns on investment. The key findings from this section are as follows:

- Improving coverage of ECEC in RS is likely to **increase years of schooling for RS's children**, as well as increasing **female labour market participation**. The **monetized benefits** of these two outcomes are worth up to **10.9 billion BAM** and **171 million BAM** respectively.
- **Failing to invest** in improved ECEC coverage could **cost RS** between **5.2 and 9.4 billion BAM** over the next 30 years, depending on the scale-up scenario.
- The **monetized benefits** of improved ECEC coverage are over **6 times greater** than the costs, depending on the scale-up scenario. Over the next 30 years, the expected **returns on investment** in a fast scale-up of ECEC coverage sit at **6.7 BAM** for every **1 BAM** invested.

In order to achieve these impressive results and mobilize for scaling up coverage of high quality ECEC, a number of recommendations have been developed. These recommendations are provided in detail in Section 5; however, some of the most significant of these include:

- **Strengthen and harmonize policy and legal structures:** Whilst policies and legislation do exist in RS to make ECEC universal for children in the year before primary school, there are significant disparities in their harmonization and implementation across the entity's municipalities/cities. A core priority should be to ensure that the preparatory programme is available to all children across the RS regions. Policies surrounding ECEC could also be further enhanced – both by expanding the ages for which ECEC preparatory programmes are intended (for example, for children from three years of age until entry to primary school) and by increasing the duration of programmes (for example, with the minimum duration being 600 hours).
- **Optimize the use of public budgets for human capital development:** The projected costs associated with ECEC in RS are substantial, and public budgets will need to be optimized if the scale-up is to be facilitated. Efficiency savings could also be made – for example, it is recommended that some primary school premises could be repurposed to accommodate preschool-aged children. This avoids large capital expenditures that would arise from constructing separate preschools. Additionally, another priority in the future will be to maintain manageable student-teacher ratios so as not to hinder quality learning due to large classrooms. Current student-teacher ratios are already good in terms of international standards, at 14 students per teacher at preschool level. The accompanying database provides details on the recommended number of teachers to be hired each year. RS should place equity at the heart of its scale up of ECEC, by prioritizing activities that ensure that the most vulnerable or at-risk children have the best opportunities for early learning.
- **Develop strong partnerships with the private sector:** Given the financing gap associated with this ECEC scale-up, it will require significant investment from both public and private actors. Domestic government financing, however, will form the foundation of these investments. Given limited fiscal space, it will be important for government stakeholders in RS to draw up multi-year operational and financial plans to guide these investments. Further, innovative financing approaches (such as social impact bonds or blended finance) can be explored to plug financing gaps.

Recommendations for how to further facilitate this scaled-up access to services can be found in *Section 5: Conclusions and Recommendations*.



SOCIAL PROTECTION

CONTEXT

Status

In Republika Srpska, according to the most recent official poverty statistics, 17.4% of households lived below the poverty line in 2015,¹⁹⁸ and the situation has very likely worsened due to the impact of the recent COVID-19 pandemic, inflation, and economic crises. Further, over one third (36.6%) of all poor households in BiH are located in RS.¹⁹⁹ Children are particularly vulnerable to poverty, with consistently higher poverty rates than the general population: recent statistics on RS child poverty are not available, but it is estimated that 30.6% of all children below 18 years of age in BiH lived in poverty in 2011, compared to 23.4% for the total BiH population.²⁰⁰ According to a UNICEF analysis of multidimensional poverty and material deprivation, almost all children under 5 years of age (98%) in BiH are deprived in at least one dimension, and a third (33%) in four or more dimensions at a time. Concerningly, children aged 0 to 4 in RS are likely to be deprived in Nutrition (72%), Child Development (58%), Violent Discipline (53%) and Health (29%).²⁰¹ This suggests that young children in RS are exposed to poverty, deprivation and toxic stress.

Of particular concern in RS's social protection system are families from rural areas, female-headed households, Roma families, and families with children with disabilities - all of whom are vulnerable across numerous dimensions and may struggle to access social protection. Inequities are strongly correlated with the socio-economic status of the households. In RS, the poverty rate in rural areas (20.9%) is nearly double that in urban areas (11.9%)²⁰², but social benefits and costs of living incentivize living in rural areas. The gender of the head of the household bears significant influence on relative poverty: in RS, the poverty rate of households whose head is a female is 23.2%, in contrast with 15.2% for male-headed households.²⁰³

Further, it is estimated that having a disability increases the probability of becoming poor by 18%²⁰⁴ and that almost 80% of Roma children live in poverty.²⁰⁵

Child poverty is a particularly important issue to tackle in RS, as the effects can last well into adulthood.²⁰⁶ This is because factors such as poor health, nutrition and lack of education can set these individuals behind their peers, and, therefore, make it challenging to improve their material standing and to break the intergenerational cycle of poverty and exclusion.

Laws and Policies

The Law on Child Protection in RS gives parents across RS the right to a child allowance, maternity allowance, reimbursement of maternity benefits, and half-time work for children with disabilities.²⁰⁷ Despite the progress brought by the implementation of the RS Law on Child Protection and by the several key amendments made in 2018, 2019 and 2021, there is still the need to harmonize it with the legal provisions within the Convention on the Rights of the Child. For instance, the CRC states that children under 18 should be ensured protection and care for their well-being, whereas the child allowance in RS is currently made available only to children younger than 15 years of age.

Child Support is one of the rights in the field of child protection and a specific form of social care for children implemented in RS. It consists of allowances to families aimed at the establishment of favourable conditions for the raising, upbringing and education of children. The child allowance is for all children up to the age of 15 if they attend school regularly, and all children with developmental delays or disabilities. Conditions, amounts and modes of exercising the right to child support are regulated by the RS Law on Child Protection.²⁰⁸ Only families with a monthly income below 20% of the base salary of the previous year in RS for the first and second child, 21% for the third child, and 23% for the fourth child, are eligible.²⁰⁹

198 Agency for Statistics of Bosnia and Herzegovina (2018). Household Budget Survey in Bosnia and Herzegovina 2015. TB15, (Agency for Statistics: Sarajevo, Bosnia and Herzegovina)

199 Ibid.

200 UNICEF (2012). Multiple Indicator Cluster Survey (MICS), (UNICEF: Sarajevo, Bosnia and Herzegovina)

201 Ibid.

202 Agency for Statistics of Bosnia and Herzegovina (2018). Household Budget Survey in Bosnia and Herzegovina 2015. TB15, (Agency for Statistics: Sarajevo, Bosnia and Herzegovina)

203 Ibid.

204 Initiative for Better and Humane Inclusion, 2016

205 UN Committee on the Rights of the Child (2019) Bosnia and Herzegovina Country Report

206 UNICEF (nd). Social Protection. Available at: <https://www.unicef.org/bih/en/node/501>

207 UN Committee on the Rights of the Child (2019) Bosnia and Herzegovina Country Report

208 Republika Srpska Public Fund for Child Protection (2022). 'Children's allowance', RS Public Fund for Children, published online. Available at: <http://www.jfdz.org/sr/page/16/dodatak-na-djetsu>

209 Official Gazette of Republika Srpska. Nos 114/17, 122/18 and 107/19

Families are entitled to an amount equivalent to 18% of the minimum wage in the previous year, for the first, second and fourth child, and 26% for the third child. As of 2023, the latest conditionalities define as entitled to the child allowance those households with a total monthly income per member between 130 BAM and 149.50 BAM, depending on the number of children in the household. The amount of the child allowance currently sits at 117 BAM for the first, second and fourth child, 169 BAM for the third child, and 208 BAM for children who exercise the right regardless of financial status and regardless of birth order.²¹⁰

Financing

Promisingly, the total budget allocated to social protection expenditures in RS amounts to 21.7% of the GDP, decreasing from 23.1% of GDP in 2020, and increasing compared to 21.4% in 2019.²¹¹ The social protection budget in RS is still less than two thirds of the EU average of 31.8%, but is largely in line with western Balkan neighbours, such as Croatia and Serbia who spent 24.3% and 21.9% respectively.²¹² However, out of the total amount allocated to social protection, around 75% pertains to contributory social insurance, and almost 5% is spent on administration costs.²¹³

Expenditure on social protection for families and children is low in RS, and sits at just 0.9% of GDP in 2021.²¹⁴ Within the social protection budget share allocated to non-contributory social assistance benefits (21%), more than 60% (or 2.9% of GDP) is spent on war-related benefits, and only 20% on families and children, which translates into only 0.9% of GDP.²¹⁵ This amount has remained fairly stable throughout the years, sitting at 1.0% of GDP in 2020 and 0.8% in 2019.²¹⁶ Within family/child benefits, more than 60% are non-means tested, while only 39% are specifically targeting the most vulnerable.²¹⁷ Given that children are

particularly vulnerable to poverty, these spending patterns show a worrying status quo where insufficient funding is dedicated to the upliftment and support of children and families.

Zooming into the RS Child Support allowance, the number of beneficiaries in 2021 amounts to 12,033, covering only 17,395 children.²¹⁸ The total number of children covered by the allowance therefore represents just 11.6% of the child population aged 0–15 in RS.²¹⁹ Further, total beneficiaries have been dramatically decreasing in the past four years: from 21,838 in 2018 to 15,388 in 2019, and to 13,381 in 2020.²²⁰ Although it is important to note that the total number of children in RS is also rapidly decreasing, RS ought to still remain cautious that there are not barriers to accessing the child allowance for its most vulnerable children and families.

RS is making good progress with the implementation of a solidarity contribution of 0.25% of net salary to the RS Solidarity Fund. This is intended specifically to meet the needs of vulnerable children.²²¹ Moreover, contributions to the Child Protection Fund have increased from 1% in 2008 to 1.70% in 2018, indicating the increasing priority placed upon child protection by RS.²²² However, the existing social protection system is particularly inefficient at targeting social transfers – estimates suggest that the poorest quintile of the BiH population only receives 17% of non-contributory benefits, while the wealthiest receives 20%. Further, the monetary value of social transfers is low and insufficient to fulfil basic needs, and poor targeting is making their effects on poverty reduction negligible. Thus, there is a clear need to both increase spending on child-focused social protection in RS and to improve the efficiency of spending and targeting of the social protection system.

210 Republika Srpska Public Fund for Child Protection (2022). 'Children's allowance', RS Public Fund for Children, published online. Available at: <http://www.jfdz.org/sr/page/16/dodatak-na-djetsu>

211 Republika Srpska Institute of Statistics (2023). Integrated system of social protection 2021. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/socijalna_zastita/integrirani_sistem_socijalne_zastite/2021/Integrirani_Sistem_Socijalne_Zastite_2021.pdf

212 EuroStat (2022). Social Protection Expenditure. Available at: <https://ec.europa.eu/eurostat/web/main/data/database>

213 Republika Srpska Institute of Statistics (2023). Integrated system of social protection 2021. Available at: https://www.rzs.rs.ba/static/uploads/saopstenja/socijalna_zastita/integrirani_sistem_socijalne_zastite/2021/Integrirani_Sistem_Socijalne_Zastite_2021.pdf

214 Ibid.

215 Ibid.

216 Ibid.

217 Ibid.

218 Republika Srpska Institute of Statistics (2022). Social Welfare 2022. Available at: https://www.rzs.rs.ba/static/uploads/bilteni/socijalna_zastita/Bilten_Socijalna_Zastita_2022_WEB.pdf

219 Republika Srpska Institute of Statistics (2022). Social Welfare 2022. Available at: https://www.rzs.rs.ba/static/uploads/bilteni/socijalna_zastita/Bilten_Socijalna_Zastita_2022_WEB.pdf

220 Ibid.

221 N. Obradovic and M. Jusic (2019). ESPN Thematic Report on Financing social protection: Bosnia and Herzegovina, (ESPN: Brussels, Belgium)

222 Ibid.

SOCIAL PROTECTION INTERVENTIONS: CHILD ALLOWANCE MODELLING

Five scenarios were analyzed, guided by RS's existing Child Protection Law and a universal cash transfer model.

Each scenario has two aspects: which families are eligible for the grant, and what the transfer amount would be. Scenario A models a situation where all households earning less than 20% of the lowest salary in RS receive the transfer, and the transfer amount per child is 18% of minimum wage. Scenario B models a situation where all households earning less than 30% of the minimum wage in RS receive the transfer, and the transfer amount is unchanged. Scenario C models a situation where all households earning less than 20% of the minimum wage in RS receive the transfer, and the transfer amount per child is 27% of minimum wage. Finally, Scenario D models a situation where all households earning less than 30% of minimum wage in RS receive the transfer, and the transfer amount per child is 27% of minimum wage. In each scenario, the coverage of the social transfer is scaled up to reach 100% of the target population by 2025. These scenarios were developed prior to the 2023 increases in child allowances by the government of the RS.

Scenario E refers to a quasi-universal child allowance, given to all families with children younger than seven years of age regardless of family income, employment status, or other demographic and economic concerns.²²³

The universality of this grant is particularly important, as confirmed by interviews with key informants pointing to significant targeting and exclusion errors²²⁴ leading to inefficiencies and insufficient coverage. Including more checks, such as household visits, to detect fraud in a targeted system, comes at a high administrative cost. Furthermore, a means-tested benefit can also act as a disincentive to seeking benefits among families who do not wish to be identified as poor within their communities. Implementing a universal child allowance removes the stigma as well as the exclusion errors from the system, as well as the additional administrative costs, and therefore allows for the poorest families to have better access to the grants that they require.

A breakdown of the differences in these scenarios is displayed in Figure 10 below. Due to modelling limitations, the increase in transfer amount was not able to be modelled, and therefore Scenarios A and C were considered identical, as were Scenarios B and D.

223 UNICEF (2017). Universal Child Benefits in Europe and Central Asia: Regional Social Protection Brief: 4, (UNICEF: Brussels, Belgium)

224 Analysis of the systems in BiH, reported by key informants, noted that targeting was particularly difficult and inefficient. Lack of data, including census data on demographics, and expenditure data from households and families, makes it extremely difficult to accurately identify families in need.

FIGURE 10: DIFFERENCES IN THE SCALE-UP SCENARIOS MODELLED

| | Grant amount | Families covered | Summary |
|----------------------|-----------------------|---|--|
| Child Protection Law | 18% of minimum wage | Households earning less than 20% of minimum wage in RS | Households earning less than 20% of minimum wage in RS |
| Scenario A | 18% of minimum wage | Households earning less than 20% of minimum wage in RS | Identical to the existing law |
| Scenario B | 18% of minimum wage | Households earning less than 30% of minimum wage in RS | Increased coverage of the existing law |
| Scenario C | 27% of minimum wage | Households earning less than 20% of minimum wage in RS | Increased transfer amount of the existing law |
| Scenario D | 27% of minimum wage | Households earning less than 30% of minimum wage in RS | Increased both coverage and amount of the existing law |
| Scenario E | 20% of BDP per capita | All household with children younger than seven years of age | Universal child transfer |

BENEFITS

The effects of the implementation of the existing cash transfer for children in RS were analyzed using a life cycle approach – spanning health, education and labour market outcomes. Analysis of the impacts of the existing child allowance proposal was carried out in advanced Excel. Many variables were also obtained through the 2015 Household Budget Survey, analysis of which was carried out in Stata. The effects of the implementation of the existing cash transfer for children in RS were analyzed using a life cycle approach – spanning health, education and labour market outcomes. Importantly, this analysis was done independently from the preceding education and health analysis, in order to isolate the effect of the child allowance on these indicators.

A review of cash transfer programmes worldwide found that cash transfers consistently increased total household expenditure, as well as food expenditure.²²⁵ Hence, besides an overall increase in consumption, we expect child grants to reduce malnutrition and the associated

physical effects, such as stunting or obesity among children.²²⁶ Receipt of cash transfers was also associated with increased school attendance, particularly among girls.²²⁷ Poverty is also associated with toxic stress, which increases the risks of poor physical and cognitive health later in life.²²⁸ These life-long effects can be mitigated through cash transfers providing respite from conditions of extreme scarcity and reducing the stress children experience in their home environment. Therefore, there is clear international evidence that cash transfers greatly improve child’s education and health.

Figure 11 illustrates the pathways through which we expect spending on social protection to improve poverty, inequality, education and health outcomes. There are both direct and indirect channels – increased household consumption reduces child poverty and inequality, and has a multiplier effect on economic growth, while the transfer

225 F. Bastagli, J. Hagen-Zanker and G. Sturge (2016). ‘Cash transfers: What does the evidence say? A rigorous review of programme impact and of the role of design and implementation features’, Overseas Development Institute, published online 27 July 2016. Available at <<https://odi.org/en/publications/cash-transfers-what-does-the-evidence-say-a-rigorous-review-of-impacts-and-the-role-of-design-and-implementation-features/>>

226 This was further confirmed when looking at the effect of cash transfers on health and nutrition indicators – families were more likely to use health services, have 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 provision of nutritional supplement or behavioural change training, which when provided together with cash transfers, created more consistent nutritional improvements among children.

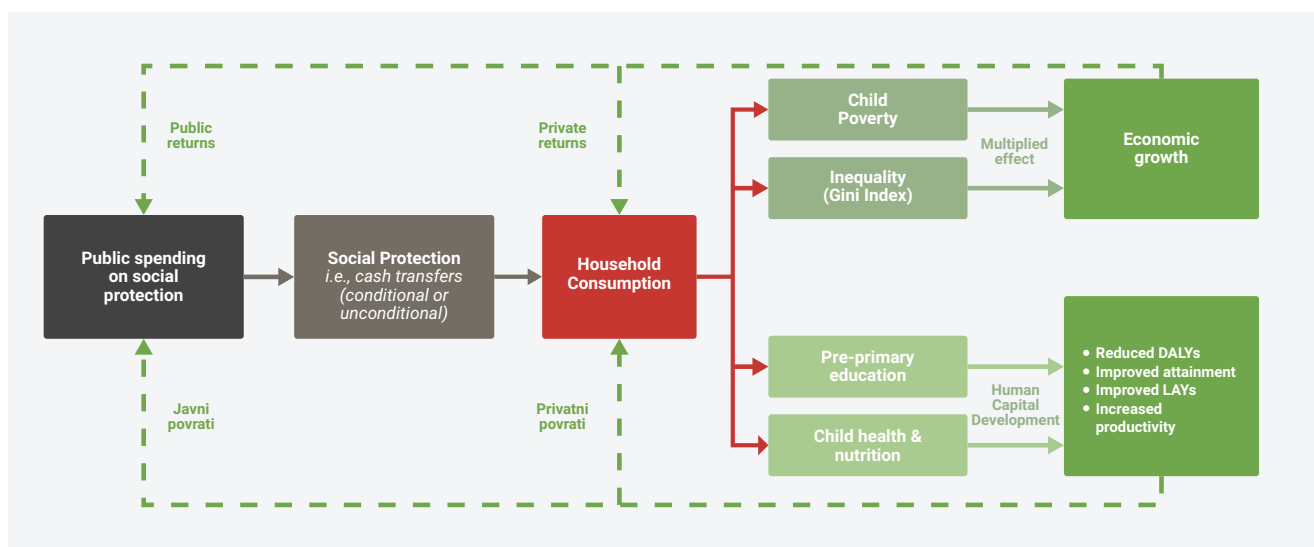
227 F. Bastagli et al. (2016) ‘Cash transfers’

228 L. Francis, K. DePriest, M. Wilson and D. Gross (2018). ‘Child Poverty, Toxic Stress, and Social Determinants of Health: Screening and Care Coordination’, Online Journal of Issues in Nursing, 23(3):2

tends to also increase access to pre-primary education and health services, thus contributing to human capital development and overall increased productivity.

More detail on these pathways can be found in the Methodological Note.

FIGURE 11: SOCIAL PROTECTION IMPACT PATHWAYS



Improvements in Health and Nutrition Outcomes

Cash transfers have been associated with improvements in child health outcomes in literature examining cash transfer schemes around the world.²²⁹ Thus, two child health indicators were modelled – under-5 deaths and stunting cases. Data from the Multiple Indicator Cluster Survey (MICS) conducted in BiH in 2012 and from the UN-FPA’s Country Programme Evaluation conducted in 2019 are used to analyze these indicators, as well as extract Years of Life lived with Disability (YLDs) and Disability-Adjusted Life Years (DALYs). The table below details the health outcomes of the four scale-up scenarios. Scenarios A and C model when the grant is given to households earning less than 20% of minimum wage in RS, as specified in the existing Law on Children Protection in RS. Scenarios B and D increase the eligibility for the child allowance to include all families earning less than 30% of the minimum wage in RS. All scenarios are compared to the baseline under which 18% of children are covered by the existing child allowance in RS.

In Scenarios A and C, an average of 15 and 222 child deaths and stunting cases are averted in RS over the 30-year scale-up period, while an average of 456 YLLs (Years of Life Lost due to premature mortality), 162 YLDs and 618 DALYs are averted over the same period. The majority of these health impacts can be observed within the first ten years following the implementation of the new child allowance. Therefore, although health impacts tend to be thought of as longer-term interventions, the pay-off to implementing the new child allowance is relatively high in the short run, and therefore yields very tangible results almost immediately. This translates to a total of 460 child lives saved in Scenarios A and C, and a total of 691 child lives saved in Scenarios B and D. These totals represent the sum of all lives saved annually for the period between 2022 and 2052. Therefore, by increasing coverage of the child allowance to more families, over 200 more child lives are able to be saved. However, it is important not to underestimate the value of the existing child allowance scheme, which will still provide large reductions in child deaths, YLLs, YLDs, DALYs, and stunting.

229 F. Bastagli et al. (2016) ‘Cash transfers’

TABLE 19: ADDITIONAL CHILD DEATHS, YLLS, YLDS, DALYS, AND STUNTING CASES AVERTED (AVERAGE AND IN TOTAL) FOR SCALE-UP SCENARIOS A–D IN TEN-YEAR INCREMENTS

| | Scale-up Scenarios A & C (normal coverage) | | | | | Scale-up Scenarios B & D (high coverage) | | | | |
|--------------|--|--------------|--------------|---------------|------------------------|--|--------------|--------------|---------------|------------------------|
| | Child deaths averted | YLLs averted | YLDs averted | DALYs averted | Stunting cases averted | Child deaths averted | YLLs averted | YLDs averted | DALYs averted | Stunting cases averted |
| 2022 - 32 | 16 | 490 | 174 | 664 | 238 | 25 | 734 | 261 | 995 | 357 |
| 2022 - 42 | 16 | 472 | 168 | 639 | 229 | 24 | 707 | 251 | 959 | 344 |
| 2022 - 52 | 15 | 456 | 162 | 618 | 222 | 23 | 684 | 243 | 927 | 333 |
| Total | 460 | 13,678 | 4,862 | 18,540 | 6,651 | 691 | 20,517 | 7,293 | 27,809 | 9,976 |

The benefits accrued in Scenarios A through D are amplified even further under Scenario E, where the child allowance is made universal. Over 1,900 child lives are saved, with over 77,000 DALYs averted and over 27,000 stunting cases averted. Thus, Scenario E allows for an almost 40%

increase in the number of child lives saved compared to Scenarios B and D, illustrating the value of a universal transfer, not only in terms of the lives saved, but furthermore in the improved livelihoods due to better health.

TABLE 20: ADDITIONAL CHILD DEATHS, YLLS, YLDS, DALYS AND STUNTING CASES AVERTED (AVERAGE AND IN TOTAL) FOR SCENARIO E IN 10-YEAR INCREMENTS

| | Scale-up Scenario E (universal coverage) | | | | |
|--------------|--|--------------|--------------|---------------|------------------------|
| | Child deaths averted | YLLs averted | YLDs averted | DALYs averted | Stunting cases averted |
| 2022 - 32 | 69 | 2,040 | 725 | 2,765 | 992 |
| 2022 - 42 | 66 | 1,965 | 698 | 2,663 | 955 |
| 2022 - 52 | 64 | 1,900 | 675 | 2,575 | 924 |
| Total | 1,918 | 56,991 | 20,257 | 77,248 | 27,712 |

Therefore, under all scenarios there is massive potential to save the lives of thousands of children, and avert thousands of DALYs and stunting cases:

- For **Scale-up Scenarios A and C**, in the shortest time horizon (up to 2032), **16 child deaths** are averted, **664 DALYs** are averted, and **238 stunting cases** are averted. Across all indicators, we see a small decrease to **15 child deaths** averted, **618 DALYs** averted, and **222 stunting cases** averted when studied until **2052**. Thus, the majority of the health benefits of the child allowance are already visible in the first 10 years. Over the next 30 years, this translates into a total of **460 child lives** saved, a total of **18,540 DALYs** averted, and **6,651 stunting cases** averted over the normal coverage scenario of the child benefit.
- **Scale-up Scenarios B and D** reflected **even larger health benefits**. In the shortest time horizon, **25 child deaths** are averted, **995 DALYs** are averted, and **357 stunting cases** are averted **by 2032**. Across all indicators, when studied until **2052**, we see a small decrease to **23 child deaths** averted, **927 DALYs** averted, and **333 stunting cases** averted. This equates to a total, over the next thirty 30 years, of **691 child lives** saved, **27,809 DALYs** averted, and **9,976 stunting cases** averted over the high-coverage scenario of the child benefit.
- In **Scenario E**, in the shortest time horizon (up to 2032), **69 child deaths** are averted, **2,765 DALYs** are averted, and **992 stunting cases** are averted. Across all indicators, when studied until 2052, we see a small decrease to **64 child deaths** averted, **1,900 DALYs** averted, and **924 stunting cases** averted. This implies that **universal coverage of child benefits** under Scenario E yields the **greatest benefit** of the studied scenarios to health indicators, with a total of **1,918 child lives** saved, a total of **77,248 DALYs** averted, and **27,712 stunting cases** averted over the next 30 years.

Impact on Education, Employment, Earnings and Poverty

Globally, there is significant evidence that cash transfers increase school attendance.²³⁰ However, the evidence is less clear on whether learning outcomes are improved for children in households that receive a cash transfer. Thus, in order to determine whether the new child allowance is able to make a meaningful impact on a child's learning outcomes, primary school and secondary school completion is modelled, as well as employment, poverty and earnings. "Employment" indicates how many additional children obtain full-time employment compared to the baseline, "Out Of Poverty" indicates how many additional children exit poverty²³¹ as a result of the educational and employment effects of the child allowance, and "Earnings" indicates the increase in earnings compared to the average earnings a child in poverty could have expected to make.

An average of over 100,000 additional children complete primary school over 30 years in Scenarios A and C, while an average of over 150,000 additional children complete primary school over 30 years in Scenarios B and D. An average of 207 additional children complete secondary school over 30 years in Scenarios A and C, compared to an average of 310 under Scenarios B and D. An increase in eligibility for families receiving the child allowance increases the number of children who complete secondary school by over 100 children over the entire scale-up period. There is therefore a clear improvement in educational outcomes as a result of the cash transfer to children. In all scenarios, the largest benefits are realized in the first 10-year scale-up period, indicating that many of the benefits in terms of improving both primary and secondary school completion will be realized relatively early as a result of a child allowance, under both the baseline coverage and improved-coverage scenarios.

The results in the table below illustrate how an improved child allowance would boost employment, reduce poverty, and increase lifetime earnings. An average of 51 additional individuals are employed over the 30-year scale-up period under Scenarios A and C, compared to an average of 158 under Scenarios B and D. The poverty outcomes are smaller, with an average of an additional 19 individuals lifted out of poverty under Scenarios A and C, compared to an average of 56 additional individuals under Scenarios B and D over the same period. This raises some concerns

²³⁰ F. Bastagli et al. (2016) 'Cash transfers'

²³¹ For the purposes of this analysis, poverty refers to whether an individual would still qualify for the child allowance grant, based on the level of income they receive, whether it be from full- or part-time employment, or non-working income sources.

about the quality of employment available in the RS, as this suggests that individuals can be employed full-time, but based on their income are still in poverty. Despite this, in Scenarios A and C, lifetime earnings increase by over 17,000 BAM in the 30-year scale-up period, and by over 52,000 BAM in Scenarios B and D. This translates to a total increase in lifetime earnings of over 520,000 BAM in

Scenarios A and C, and a total increase in lifetime earnings of over 1.5 million BAM in Scenarios B and D. Therefore, it is clear that an improved child allowance vastly improves both educational and labour market outcomes

TABLE 21: ADDITIONAL CHILDREN COMPLETING PRIMARY SCHOOL, SECONDARY SCHOOL, ENTERING EMPLOYMENT, EXITING POVERTY, AND INCREASING LIFETIME EARNINGS (AVERAGE AND IN TOTAL) FOR SCALE-UP SCENARIOS A–D IN 10-YEAR INCREMENTS EARNINGS EXPRESSED IN BAM AND DISCOUNTED AT 3%.

| | Scale-up Scenarios A & C (normal coverage) | | | | | Scale-up Scenarios B & D (high coverage) | | | | |
|--------------|--|-----------------------------|----------------|--------------|----------------|--|-----------------------------|------------------|--------------|----------------|
| | Primary school completion | Secondary school completion | Earnings | Employment | Out of Poverty | Primary school completion | Secondary school completion | Earnings | Employment | Out of Poverty |
| 2022 - 2032 | 112,871 | 228 | 18,898 | 52 | 20 | 169,306 | 343 | 56,695 | 170 | 60 |
| 2022 - 2042 | 108,738 | 220 | 18,206 | 52 | 19 | 163,107 | 330 | 54,619 | 164 | 58 |
| 2022 - 2052 | 105,126 | 213 | 17,601 | 51 | 19 | 157,688 | 319 | 52,804 | 158 | 56 |
| Total | 3,153,770 | 6,382 | 528,044 | 1,582 | 556 | 4,730,655 | 9,573 | 1,584,131 | 4,746 | 1,669 |

The table below illustrates that these education and labour market gains would be even greater under a universal child allowance. In Scenario E, primary school completion in total increases almost threefold compared to Scenarios B and D. Over 26,000 additional children graduate from secondary school: an increase of over 16,000 compared to Scenario B and D. Lifetime earnings increase by over 68 million BAM, lifting over 550,000 chil-

dren out of poverty, compared to over 500 in Scenarios A and C, and 1,600 in Scenarios B and D. Interestingly, more people are lifted out of poverty than attain employment – with over 200,000 individuals gaining full-time employment in Scenario E. This may reflect the pro-poor power of a universal child transfer, which is allowing individuals to be lifted out of poverty, even if they are not able to attain employment.

TABLE 22: ADDITIONAL CHILDREN COMPLETING PRIMARY SCHOOL, SECONDARY SCHOOL, ENTERING EMPLOYMENT, EXITING POVERTY, AND INCREASING LIFETIME EARNINGS (AVERAGE AND IN TOTAL) FOR SCENARIO E IN 10-YEAR INCREMENTS EARNINGS EXPRESSED IN BAM AND DISCOUNTED AT 3%.

| | Scale-up Scenario E (universal coverage) | | | | |
|--------------|--|-----------------------------|-------------------|----------------|----------------|
| | Primary school completion | Secondary school completion | Earnings | Employment | Out of Poverty |
| 2022 - 32 | 470,295 | 952 | 2,441,586 | 7,315 | 19,794 |
| 2022 - 42 | 453,074 | 917 | 2,352,185 | 7,047 | 19,069 |
| 2022 - 52 | 438,024 | 886 | 2,274,047 | 6,813 | 18,436 |
| Total | 13,140,707 | 26,593 | 68,221,396 | 204,388 | 553,080 |

Therefore, under all scenarios there is massive potential to improve both primary and secondary school completion, increase earnings and employment, and lift thousands of people out of poverty. The high coverage scenario modelled in Scenarios B and D results in even greater socio-economic benefits than the normal coverage scenarios in Scenarios A and C, with the universal child benefit scenario of Scenario E offering the greatest benefits across indicators. In summary:

- For **Scale-up Scenarios A and C**, a total of over **3.1 million** additional children **complete primary school**, **over 6,000** additional children **complete secondary school**, and **lifetime earnings increase by over 500,000 BAM**. Through increased educational attainment, over **1,500** additional individuals are expected to become employed, and over **500** to be lifted **out of poverty**.
- For **Scale-up Scenario B and D**, a total of **4.7 million** additional children **complete primary school**, **over 9,500** additional children **complete secondary school**, and **lifetime earnings increase by 1.5 million BAM**. Through increased educational attainment, over **4,700** additional individuals are expected to become **employed**, and over **1,600** to be lifted **out of poverty**.
- For **Scale-up Scenario E**, a total of **over 13 million** additional children **complete primary school**, **over 26,000** additional children **complete secondary school**, and **lifetime earnings increase by 68.2 million BAM**. Through increased educational attainment, **over 204,000** additional individuals are expected become **employed**, and **over 553,000** to be lifted **out of poverty**.

Benefits in Monetary Terms

The table below shows that, when monetized, the benefits are impressive, particularly in high coverage scenarios.

DALYs are monetized by multiplying the productivity gain of the average individual due to averted DALYs by current GDP per capita in BAM. This therefore shows the increase in economic productivity as a result of DALYs averted. Similarly, non-stunted children are more productive, and therefore their increased productivity is converted into higher overall lifetime earnings.

Through the increased productivity and higher lifetime earnings, the RS government is able to obtain a twofold fiscal benefit:

- Directly, through greater revenues from income tax due to higher earnings among the population, and
- Indirectly, through indirect taxes such as VAT, as individuals increase their consumption as a result of their greater incomes.

In Scale-up Scenarios A and C, the monetization of these benefits reaches well into the millions of BAM, with DALYs averted providing over 324 million BAM in economic benefits. In total, RS stands to gain over 338 million BAM in increased productivity and tax revenues as a result of the child allowance. These benefits are even higher when increasing coverage of the child allowance in Scenarios B and D. DALYs averted alone yield an economic productivity gain of over 486 million BAM, and all benefits produce a monetary gain of 509 million BAM.

TABLE 23: MONETIZATION OF BENEFITS FOR SCALE-UP SCENARIOS A–D OVER A 30-YEAR PERIOD EXPRESSED IN BAM AND DISCOUNTED AT A RATE OF 3%.

| | Scale-up Scenarios A & C (normal coverage) | Scale-up Scenarios B & D (high coverage) |
|-----------------------------------|---|---|
| DALYs averted | 324,461,967 | 486,692,951 |
| Stunting cases averted | 8,065,537 | 12,098,306 |
| Fiscal benefit (via income tax) | 1,303,845 | 3,911,535 |
| Fiscal benefit (via indirect tax) | 4,591,967 | 6,887,951 |
| Total | 338,423,317 | 509,590,743 |

The monetized benefits for Scenario E are even larger than that of the means-tested transfers. RS stands to gain almost 2.6 billion BAM over a 30-year period through

the implementation of a universal child allowance. DALYs alone contribute over 1.3 billion BAM to these benefits: almost triple the amount realized under Scenarios B and D.

TABLE 24: MONETIZATION OF BENEFITS FOR SCALE-UP SCENARIO E OVER A 30-YEAR PERIOD EXPRESSED IN BAM AND DISCOUNTED AT A RATE OF 3%.

| | Scale-up Scenario E (universal coverage) |
|-----------------------------------|--|
| DALYs averted | 1,351,924,864 |
| Stunting cases averted | 1,057,238,209 |
| Fiscal benefit (via income tax) | 168,452,213 |
| Fiscal benefit (via indirect tax) | 19,133,198 |
| Total | 2,596,748,483 |

Therefore, the monetized benefits of each of these Scale-up Scenarios are large. In summary:

- For **Scale-up Scenarios A and C**, a total of over **338 million BAM** in monetized benefits are realized over a 30-year period, equivalent to **3.04% of GDP** in 2020.
- For **Scale-up Scenarios B and D**, a total of **509 million BAM** in monetized benefits are realized over a 30-year period, equivalent to **4.58% of GDP** in 2020.
- For **Scale-up Scenario E**, a total of over **2.5 billion BAM** in monetized benefits are realized over a 30-year period, equivalent to **23.33% of GDP** in 2020.

Inequity would be significantly reduced with the application of an improved cash transfer for children. The figure below depicts the Lorenz curve for income prior to the transfer and after the transfer. The Lorenz curve is a simple way of illustrating the change in inequality, by ranking the population into income deciles and determining what share of total income is captured by each decile. The closer to the dashed, green 45 line, the closer to perfect equality the income distribution is. It is, therefore, clear that the cash transfer reduces income inequality, as the Lorenz curve shifts inwards from the pre-transfer blue line to the post-transfer red line in the figure below. This is confirmed by the Gini coefficient calculated pre- and post-transfer.

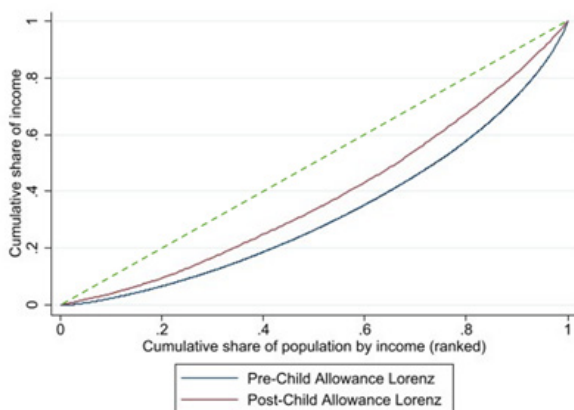


The **Gini coefficient** measures the income distribution across a population. A Gini coefficient of 0 indicates perfect equality, while a Gini coefficient of 1 represents perfect inequality.

The Gini coefficient is often graphically represented through the Lorenz curve. **The Lorenz curve** is depicted in contrast to a 45° line – the line of perfect equality. Therefore, the closer the Lorenz curve is to the 45° line, the closer the society is to perfect equality.

In order to understand the impact of the existing child allowance on inequality, a scenario where no households received any child allowances was modelled using STATA to calculate the “Pre-Child Allowance” Gini coefficient and Lorenz curve. Then, inequality was calculated for a scenario where households who currently receive a child allowance do receive their allowance to calculate the “Post-Child Allowance” Gini coefficient and Lorenz curve. While RS had a Gini coefficient of 0.31 prior to the transfer, it drops to 0.15 after the Child Protection Law transfer. As a Gini coefficient closer to 0 indicates a move towards perfect equality, it is clear that the child allowance increases equality in RS. Therefore, even the existing child allowances in RS have allowed for greater equality in the region. It should also be noted that this is a conservative estimate – it does not yet take into account the future increases in income and employment as a result of improved schooling because of the cash transfer. Therefore, the reductions in inequality are likely to be greater than estimated below, and could be even greater with a universal grant if the reductions in poverty and gains in employment outweigh the potentially regressive effects of the non-targeted nature of the grant.

FIGURE 12: LORENZ CURVE PRE- AND POST-TRANSFER



COSTS

Table 25 presents the additional costs for all scale-up scenarios over 30 years. The costs of the child allowance in RS were estimated, as well as the costs of an allowance covering more children under Scenarios B and D. The costs were primarily based on the size of the proposed transfer, as well as on the average cost of targeting cash transfer schemes. Costs were multiplied by 2.1 in order to account for the child allowance being applied to all children under fifteen, whereas the analysis for the report up until this point was for children under seven.

The total costs of these interventions will be significant, although viewing costs in per capita and child terms allows for a proportionate understanding of the investment required. For Scenarios A and C, the cost per capita ranges from an average of 47.40 BAM in the first ten years, to 102.34 BAM in the 30-year period modelled. Scenarios B and D are more expensive due to covering more children in these scenarios, with the cost per capita ranging from an average of 71.11 BAM in the first 10 years to 153.51 BAM over 30 years.

The decreasing annual average cost per child under 7 reveals the affordability of this cash transfer. Assuming a constant population, the average cost per child under 7 under Scenarios A and C ranges between 81.43 BAM annually in the first 10 years to 58.60 BAM annually over the 30-year scale-up period. This drop in annual cost per child under 7 illustrates the impact of families being lifted out of poverty, and thus a smaller number of beneficiaries being eligible for this intervention. A similar phenomenon is observed for Scenarios B and D, where the average annual cost in the first 10 years is 122.14 BAM, dropping to 87.89 BAM per child in the first 30 years.

TABLE 25: TOTAL ADDITIONAL COSTS FOR SCALE-UP SCENARIOS A–D, ACROSS DIFFERENT TIME HORIZONS
 COSTS ARE EXPRESSED IN BAM AND DISCOUNTED AT A RATE OF 3%.

| | Scale-up Scenario A & C (normal coverage) | | | Scale-up Scenario B & D (high coverage) | | |
|---|---|-------------|-------------|---|-------------|-------------|
| | 2023 - 2032 | 2023 - 2042 | 2023 - 2052 | 2023 - 2032 | 2023 - 2042 | 2023 - 2052 |
| Average cost per capita over time horizons | 47.40 | 79.87 | 102.34 | 71.11 | 119.80 | 153.51 |
| Average cost per child under seven over time horizons | 814.27 | 1,371.87 | 1,757.86 | 1,221.40 | 2,057.81 | 2,636.79 |
| Average annual cost per child under seven | 81.43 | 68.59 | 58.60 | 122.14 | 102.89 | 87.89 |
| Total cost per period | 43,073,011 | 72,569,242 | 92,987,340 | 64,609,516 | 108,853,863 | 139,481,011 |

The costs of a universal child allowance are higher than the costs under Scenarios A through D. This is as expected, as covering every child in RS under 7 years of age requires more financial outlay than only covering the poorest families. The average cost per capita is also much higher, ranging between 197.52 BAM in the first 10-year period, reaching over 426.41 BAM over the 30-year scale-up period. Even the lower bound of these costs is higher than the highest per-capita costs in Scenarios A through D, where the largest per-capita cost is under Scenarios B and D between 2023 and 2052, at 153.51 BAM. However, the cost per child does fall in a similar way to the previous scenarios – the average annual cost of the universal transfer standing at 339.28 BAM over the first 10 years, and falling to an average annual cost of 244.15 BAM over the full scale-up period, reflecting the savings made when families are lifted out of poverty by the transfer. Therefore, in summary:

- For Scale-up Scenarios A and C, the average annual costs per period per child under 7 in the shortest time horizon (up to 2032) sits at 81 BAM (equivalent to 0.07% of GDP per capita in 2021). This cost falls to 59 BAM per child under 7 when studied until 2052 (equivalent to 0.05% of GDP per capita).
- Scale-up Scenarios B and D reflected higher costs per child under 7. In the shortest time horizon, costs per child under seven sat at 122 BAM (equivalent to 1.1% of GDP per capita in 2021); This fell in the longest time horizon (to 2052) to 88 BAM (equivalent to 0.8% of GDP per capita in 2021).
- The universal Scale-up Scenario E, as expected, reflected even higher costs per child. In the shortest time horizon, costs per child under seven sat at 339 BAM (equivalent to 3.0% of GDP per capita in 2021); This fell in the longest time horizon (to 2052) to 244 BAM (equivalent to 2.2% of GDP per capita in 2021).

TABLE 26: TOTAL ADDITIONAL COSTS FOR SCENARIO E, ACROSS DIFFERENT TIME HORIZONS COSTS ARE EXPRESSED IN BAM AND DISCOUNTED AT A RATE OF 3%.

| | Scale-up Scenario E (universal coverage for children under 7 years of age) | | |
|---|---|--------------------|--------------------|
| | 2023 - 2032 | 2023 - 2042 | 2023 - 2052 |
| Average cost per capita | 197.52 | 332.78 | 426.41 |
| Average cost per child under seven | 3,392.78 | 5,716.14 | 7,324.43 |
| Average annual cost per child under seven | 339.28 | 285.81 | 244.15 |
| Total cost per period | 179,470,878 | 302,371,842 | 387,447,252 |

COST OF INACTION

The cost-of-inaction analysis illustrates that there will be significant economic costs for RS if the government does not improve child allowance programmes.

The COI is calculated by determining the total additional economic benefit of the scale-up scenario (in comparison to the baseline), less the costs of the scale-up. Thus, the COI is able to contextualize the numbers used in the cost and benefit sections above, as it illustrates what the total economic benefit of the programme would be to RS's economy, less the costs of the programme. Table 27 displays the results from the COI analysis. Over 30 years, not implementing the child allowance scheme would cost RS over 245 million BAM. Failure to implement a programme with increased coverage, as modelled in Scenarios B and D, would cost RS over 370 million BAM, meaning that the COI is even higher for these two scenarios. The additional cost of inaction when comparing the normal

coverage scenarios to the high-coverage scenarios is therefore over 120 million BAM. Therefore, despite the additional costs of covering more children in Scenarios B and D, the economic benefits in terms of DALYs averted, stunting cases averted, and increased fiscal revenue outweigh these costs.

TABLE 27: ECONOMIC BENEFITS, COSTS AND THE COST OF INACTION FOR SCALE-UP SCENARIOS A–D, ACROSS DIFFERENT TIME HORIZONS

| | Scale-up Scenarios A & C (normal coverage) | | | Scale-up Scenarios B & D (high coverage) | | |
|---|---|--------------------|--------------------|---|--------------------|--------------------|
| | 2023 - 2032 | 2023 - 2042 | 2023 - 2052 | 2023 - 2032 | 2023 - 2042 | 2023 - 2052 |
| Total Additional Economic Benefits | 122,235,782 | 234,514,438 | 338,423,317 | 184,057,336 | 353,124,576 | 509,590,743 |
| Total Additional Costs | 43,073,011 | 72,569,242 | 92,987,340 | 64,609,516 | 108,853,863 | 139,481,011 |
| Cost of Inaction | 79,162,771 | 161,945,195 | 245,435,977 | 119,447,820 | 244,270,712 | 370,109,733 |

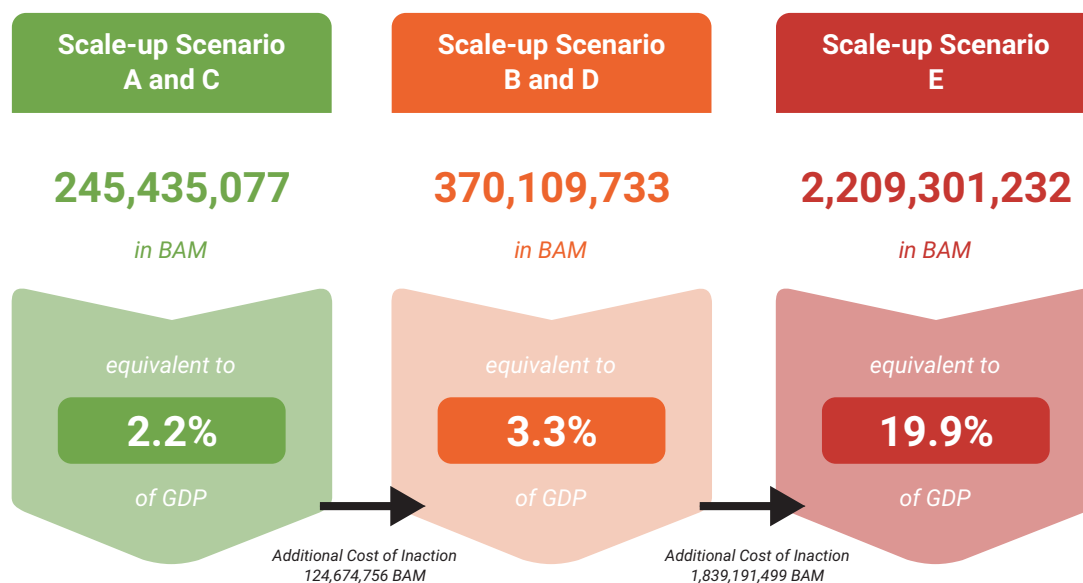
Despite the high costs of a universal child allowance, **Table 28** illustrates that the COI is even higher. Over 30 years, not implementing a universal child allowance would cost RS over 2 billion BAM. This is almost 700 million

times more than the RS economy would lose as a result of not implementing the Law on Child Protection. Therefore, this provides strong rationale for advocating for a universal child allowance in RS.

TABLE 28: ECONOMIC BENEFITS, COSTS AND THE COST OF INACTION FOR SCENARIO E, ACROSS DIFFERENT TIME HORIZONS

| | Scale-up Scenario E (universal coverage) | | |
|---|--|----------------------|----------------------|
| | 2023 - 2032 | 2023 - 2042 | 2023 - 2052 |
| Total Additional Economic Benefits | 936,259,399 | 1,798,019,979 | 2,596,748,483 |
| Total Additional Costs | 179,470,878 | 302,371,842 | 387,447,252 |
| Cost of Inaction | 756,788,522 | 1,495,648,137 | 2,209,301,232 |

FIGURE 13: SUMMARY – COST OF INACTION 2022–2050 FOR SCALE-UP SCENARIOS A AND C, B AND D, AND E



The cost of inaction rises for the increased coverage scenarios modelled in Scenarios B & D and Scenario E. In summary:

- For **Scale-up Scenarios A & C**, the cost of inaction in the shortest time horizon (up to **2032**), sits at **79 million BAM** (equivalent to **0.71% of GDP** in 2020). This cost **rises** to nearly **162 million BAM** when studied until **2042**, and reaches **245 million BAM** by **2052** (equivalent to **2.21% of GDP** in 2020).
- **Scale-up Scenarios B & D** reflected a **higher cost of inaction**. In the shortest time horizon, the cost of inaction stood at **119 million BAM** (equivalent to **1.07% of GDP** in 2020), and **rises** to over **244 million BAM** by **2042**. In the longest time horizon (to **2052**), the COI sits at **over 370 million BAM** (equivalent to **3.33% of GDP** in 2020).
- **Scale-up Scenario E** reflected **even higher costs of inaction** than the previous scenarios. In the shortest time horizon, the cost of inaction sat at over **756 million BAM** (equivalent to **6.80% of GDP** in 2020). The COI **rises** to nearly **1.5 billion BAM** by **2042**, and in the longest time horizon (to **2052**) reached over **2.2 billion BAM** (equivalent to **19.85% of GDP** in 2020).

BENEFIT-COST RATIO

Investment in improved child allowance programmes is projected to reap at least a threefold return over the short- and long-term. Benefit Cost Ratios (BCRs) compare the total additional monetary benefits of the cash transfer with the total additional costs, both compared to the baseline scenario where no children in RS are covered by a sufficient child grant scheme. The ratios represent how many BAM are returned to the economy for every 1 BAM invested in the child allowance scheme.

It is clear from the following that an adequate child allowance is not simply an added expense for RS, but an investment in the improved health and productivity of its children:

- When considering **Scenarios A and C**, for every **1 BAM** invested: between 2023 and 2032, **2.8 BAM** are returned to the economy in socio-economic benefits, **3.2 BAM** are returned to the economy between 2023 and 2042, and **3.6 BAM** are returned to the economy between 2023 and 2052.
- **Scenarios B and D** have very similar returns. For every **1 BAM** invested: between 2023 and 2032, **2.8 BAM** are returned to the economy, **3.2 BAM** are returned to the economy between 2023 and 2042, and **3.7 BAM** are returned to the economy between 2023 and 2052.

TABLE 29: BENEFIT-COST RATIOS FOR CHILD ALLOWANCE UNDER SCALE-UP SCENARIOS A–D, ACROSS DIFFERENT TIME HORIZONS

| | Scale-up Scenarios A & C (normal coverage) | | | Scale-up Scenarios B & D (high coverage) | | |
|--------------------|---|-------------|-------------|---|-------------|--------------|
| | 2023 - 2032 | 2023 - 2042 | 2023 - 2052 | 2023 - 2032 | 2023 - 2042 | 2023 - 2052. |
| Benefit-Cost Ratio | 2.8 | 3.2 | 3.6 | 2.8 | 3.2 | 3.7 |

Table 30 illustrates that marginally greater benefits can be obtained from the implementation of a universal child allowance. To summarize, for every 1 BAM invested...

- Between 2023 and 2032, 5.2 BAM are returned to the economy in socio-economic benefits,
- Between 2023 and 2042, 5.9 BAM are returned to the economy,
- Between 2023 and 2052, 6.7 BAM are returned to the economy.

Therefore, there is clear evidence that a universal child allowance would result in significantly different results from an allowance that is available to all families earning below 30% of the minimum wage in RS.

SUMMARY AND RECOMMENDATIONS

The case for improving child allowance in Republika Srpska is strong. Empirical evidence generated from this study proves that in both the short and long term, the positive impacts of scaling up the coverage and size of unconditional cash transfers far outweigh the costs.

Drawing on international and regional evidence, this study has found that improved child allowance models are associated with increased total household expenditure and improved anthropometric measures among children, as well as increased school attendance and usage of health services.²³² Dominant discourse surrounding social protection measures must pivot, with child allowance being seen not as a form of cost but as an investment. Indeed, this analysis suggests that the return on investment could be nearly three times that invested across the study period, whilst the opportunity cost of not improving child allowance options could extend to a colossal 700 million BAM by 2052.

The non-monetary impacts on children of these measures should also not be understated. These options for improved unconditional cash transfer models have shown dramatic improvements in the realization of the rights of children, including the right to good health, quality education, and a life without poverty. This study has shown that with increased support to families and households with children, Republika Srpska can expect to see cases of stunting, as well as disability-adjusted life years lost, averted. Further, it was reported that these child allowance options could bring up to 20,000 children out of poverty and ensure that over 25,000 additional children

TABLE 30: BENEFIT-COST RATIOS FOR CHILD ALLOWANCE UNDER SCENARIO E, ACROSS DIFFERENT TIME HORIZONS

| | Scale-up Scenario E (universal coverage) | | |
|--------------------|--|-----------|-----------|
| | 2023–2032 | 2023–2042 | 2023–2052 |
| Benefit-Cost Ratio | 5.2 | 5.9 | 6.7 |

232 Francesca Bastagli et al. (2016). Новчани трансфери.

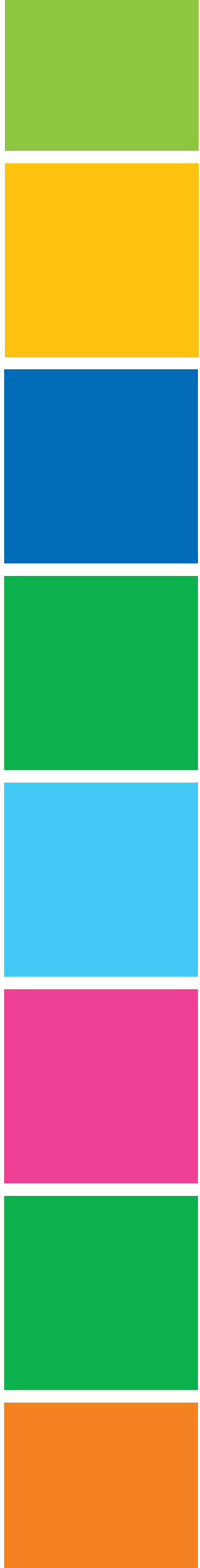
will graduate from secondary school. It is important to remember that these statistics reflect the lived experience of real children in RS. Each time a child is supported by these social protection measures, their chances to survive and thrive improve, and their basic rights are being upheld. The key findings are as follows:

- Improving child allowance coverage could result in a total of **1,918 child lives saved**, and avert over **77,000 DALYs** and nearly **28,000 stunting cases** over the next 30 years.
- Up to an additional **13 million children** could **complete primary school**, over 26,000 complete secondary school, and in total reap an additional **68.2 million BAM in lifetime earnings** by 2052. The improvement in schooling outcomes could result in up to **200,000 additional employed individuals**, and lift over **550,000 out of poverty**.
- The **monetized benefits** over a 30-year period of an improved child allowance range between **338 million BAM** (3.0% of GDP in 2020) on the low end, to nearly **510 million BAM** (4.6% of GDP), and reach up to **2.5 billion BAM** (23.3% of GDP) **with a universal child allowance to all children between 0 and 6 years of age**.
- By **2052**, the **cost to RS's economy** resulting from not improving coverage of their child allowance ranges from **245 million BAM** (2.2% of GDP in 2020), to over **370 million BAM** (3.3% of GDP), reaching up to **2.2 billion BAM** (19.8% of GDP) **with a universal child allowance to all children between 0 and 6 years of age**.
- The **returns on investments** of this improved child allowance are between **2.8 and 6.7 times greater** than the costs, depending on the scale-up scenario and time horizon under study. Over the next 30 years, the expected socio-economic **returns** for every **1 BAM** invested in a universal child allowance to all children aged 0 to 6 sit at **6.7 BAM**.

At present, however, the social protection sector is struggling in RS. Whilst the establishment and upkeep of the Public Fund for Child Protection heralds an important landmark, bringing about harmonized support for children across the entity, there is still a long way to go to recognize the benefits modelled in this study. In order to achieve these impressive results and mobilize for scaling up coverage of social protection, a number of recommendations have been developed. These recommendations are provided in detail in Section 5; however, some of the most significant of these include:

- **Optimize the use of public budgets for human capital development:** Expenditure in social protection remains low in comparison to international benchmarks and, concerning, only a small proportion of it is channelled towards children and vulnerable groups. A child-focused public expenditure review (PER) would help to better decipher the complicated system of public financing for children, and uncover the status of spending on children. With the data which are currently available, it is clear that the benefits of public spending are not focused towards children, or equitably felt between groups. In the case of social protection, a disproportionate amount of funding targets war veterans and the elderly.
- **Strengthen and harmonize policy and legal structures:** There is a need to focus more on equal access to social protection services, such as the child allowance. This requires ensuring that even the most vulnerable families have reasonable access to a Department of Social Welfare and Protection of Families and Children office. This would assist in reducing the geographical inequalities that currently exist in RS's social protection system. Moreover, this requires that the social workers be adequately skilled to assess cases brought before them, and equipped to advise on the best course of action for any given case. This may also involve increasing the age of eligibility for the child allowance to 18 years of age, from the current age limit of 15, in accordance with the Convention on the Rights of the Child.
- **Support data and information collection, management and dissemination:** Further, data limitations were a significant concern in the modelling of social protection interventions. Despite a commitment to more regular household budgetary surveys, the most recent data available from the Household Budget and Expenditure Survey took place in 2015. A new round of HBS in BiH has been conducted in 2020; however, as of April 2023 the data has not yet been made available to the public. This implies that the results will not reflect the most recent situation in BiH, as the HBS has been carried out prior to the impact of COVID-19, inflation and economic crises. The lack of census data also makes it difficult to determine the size of the population in need, thus making it almost impossible to determine levels of child poverty and accurately target social transfers.

The econometric evidence generated from this study, therefore, must serve as the base for progressive policy-making, strategic planning, and the advancement of the agenda on the rights of young children in BD. More detailed recommendations for how to achieve this can be found in Section 5: Conclusions and Recommendations.



CONCLUSIONS AND RECOMMENDATIONS

Investing in young children is, first and foremost, a moral decision. Under the Convention of the Rights of the Child (CRC) 1989, every child has basic and inalienable rights. Amongst the 54 articles of the CRC, a child's rights to life, survival and development, to health and health services, to an adequate standard of living, and to education are enshrined. The task of realizing these rights for every child begins in the first years of a child's life. At this stage in the life course, comprehensive interventions from across the Nurturing Care Framework form the foundation of a child's ability to survive, thrive, and realize these basic rights.

Beyond this moral imperative, the evidence supporting investments in young children is resounding and unequivocal. Academic research tells us that high quality ECD programmes promote healthy development, reduce adversity in childhood, and cultivate an environment of nurturing care. Interventions targeting children under the age of six are amongst the most effective of any available in human capital development, with impacts felt across the life course. As foundational years in a child's life, investments here will obviate the need for more costly expenditure in the long-term and promote sustainable economic growth and development. In education, for example, access to high-quality ECEC is associated with improved learning outcomes and students staying longer in school, thus reducing the need for remedial learning programmes and improving prospects for lifetime earnings.

In the context of Republika Srpska, the impetus to invest is more urgent than ever. With a rapidly ageing and shrinking population, the window of opportunity to invest in young children dims every year. Investments in ECD offer the best hope for catalyzing socio-economic transformation and rejuvenation. Further, improving access to ECD services is also linked to other important opportunities for RS. Accession to the European Union, for example, is reliant on the improvement of the experiences of vulnerable groups, as well as the development of social sector services, such as ECEC. Combined, there is a monumental case for exploring investments in ECD.

This study has provided sound empirical evidence that supports this case for investment. Aligning with the SDG Financing Framework in BiH²³³, this study seeks to mobilize investment for ECD amongst government, private sector, and external stakeholders. In line with findings from the international literature, scaling up multi-sectoral ECD interventions was found to be cost-effective and to have strong benefit-cost ratios in the long term. To reiterate some of the headline figures:

- Scaling up essential **health and nutrition services** targeted at young children could generate a **return on investment** of up to **three times** by 2052. This means for every 1 BAM invested, 4 BAM would be returned in socio-economic benefits. Meanwhile, the **cost of inaction** could reach over **100 million BAM** by 2052.
- If access to **ECEC** services were expanded, **female labour force participation** rates are expected to **rise by 0.5 percentage points**, and children would be expected to each benefit from up to **1.1 additional years of education**. When compared to costs, investments would be expected to yield nearly a **sevenfold return** during the study period. **Failing** to scale up could **cost RS** a catastrophic **9.4 billion BAM** by 2052.
- Improving coverage of the **child allowance** would drive down **poverty** and **inequality**, whilst also having indirect effects on **stunting** and completion of **schooling**. Over the time horizon, the **monetized benefits** are expected to be over **six times** the **costs** of the transfer, in the case of a universal child allowance. This translates into a **cost of inaction** amounting to over **2.2 billion BAM** by 2052.

Republika Srpska is, therefore, presented with a hugely significant decision – whether to invest in its young children or whether to maintain the status quo. This study presents solid evidence collated to date to justify such a decision. When allied to the rapidly shrinking and ageing population, both the time and rationale are ripe for reform. This economic and financial argument should not eclipse the strong social and moral one for improving ECD. Whilst every child has the right to survive and thrive, these rights are not being universally realized in RS. Access to high-quality programmes is often inequitable, along parameters of intersectionality (including income, disability, ethnicity, or geographical location). A social justice approach to ECD is foundational, if a bright and cohesive future for Republika Srpska is to be fostered.

233 Joint SDG Fund (2021). SDG Financing Framework (SDG-FF) in Bosnia and Herzegovina: From SDG Financing Context to the Conceptual Proposal, (Sarajevo, BiH: United Nations Bosnia and Herzegovina)

RECOMMENDATIONS

Capitalizing on these opportunities will require intensive, coordinated efforts. A strong enabling environment must be built to facilitate access to high quality ECD for all, which will be underpinned by robust social sector services. Based on the analysis feeding into this report, a set of policy recommendations has been developed to guide efforts and maximize the potential for success. These recommendations are outlined below, with practical actions and examples being used for illustration.

Recommendation 1: Strengthen and harmonize policy and legal structures. There are significant challenges in the legislative landscape for ECD in Republika Srpska. Weak overarching policies have contributed towards poor outcomes for young children, such as low rates of exclusive breastfeeding or inflated rates of child poverty. The implementation of ECD legislation also differs substantially across RS, which is breeding inequities. Policies must be made more robust across RS to facilitate a strong enabling environment for Nurturing Care and to better harmonize with the SDG agenda and EU priorities.

- **Sub-recommendation 1: Enforce the harmonization and implementation of existing policies.** Policies such as the RS Law on Preschool Education and Care related to the preparatory programme in the year prior to school entry have not been implemented across all municipalities/cities and coverage is not universal. There is a substantial downside to long-term low enrolment, with this study finding that by 2052, the cost of inaction of not investing in ECEC in RS could total 9.4 billion BAM. A similar experience is noted in the health sector. Legislation for maternal and child health is strong; however, guidelines for their implementation are not consistently upheld. Without even implementation of these guidelines, it is difficult to assess whether these policies actually work, either in single settings or universally.
- **Sub-recommendation 2: Close any remaining legislative gaps. A few legal and policy gaps remain, which hinder early childhood development.** Specifically, better regulatory policies are required to inhibit aggressive advertising of breast-milk alternatives, which have been found to reduce the rates of predominant and exclusive breastfeeding. Rates of exclusive breastfeeding up to 6 months are concerningly low in RS currently, sitting at just 20.9%.

Age-appropriate breastfeeding practices were found to be one of the most effective interventions at reducing child morbidity and mortality that RS could scale up in this study, making this an area of particular importance.

- Further, the RS Education Strategy should be implemented and further extended. This strategy has been valuable in terms of prioritizing the construction of more preschool facilities. However, it has thus far failed to institutionalize universal access to the preparatory ECEC programme and should, over time, be extended to provide a preparatory programme of 600 hours (above the 180 hours currently mandated). While the Public Fund for Child Protection in RS has already made significant strides in reaching vulnerable children with the existing child allowance, the allowance should also be expanded to cover more children (for instance, through increasing eligibility to children under 18 years of age rather than 15 years of age, in accordance with the Convention on the Rights of the Child) and to provide a more generous cash transfer. This ought to be done with the ultimate aim of creating a universal child allowance within RS, as the evidence in this report indicates that the benefits of a universal child allowance will outweigh the costs almost sevenfold. The potential returns on investment of implementing all of these policies are all significant.
- **Sub-recommendation 3: Support human capital capacities and infrastructure to implement legislation and policies.** One of the key drivers behind poor implementation outcomes is a lack of available human resources, their capacity, and infrastructure across the ECD sectors. In social protection particularly, there is a need to focus more on equal access to social protection services, such as the child allowance. This includes ensuring knowledge about the policies and social welfare interventions available, having trained and available staff to manage cases, and maintaining equity in access across different geographies. This requires ensuring that even the most vulnerable families have reasonable access to a Department of Social Welfare and a Protection of Families and Children office. This would assist in reducing the geographical inequalities that currently exist in RS's social protection system. Moreover, this

requires that the social workers be adequately skilled to assess cases brought before them and equipped to advise on the best course of action for any given case.

Recommendation 2: Optimize the use of public budgets for human capital development. The strong socio-economic benefits of improving services for young children make it a prime area for public investment. Public finances must be mobilized to meet the increased demands for resources outlined in this study. Child-friendly financing will require a number of activities to be taken, including:

- **Sub-recommendation 1: Analyze trends in public expenditure on ECD.** A child-focused public expenditure review (PER) would help to better decipher the complicated system of public financing for children, and uncover the status of spending on children. With the data currently available, it is clear that the benefits of public spending are not focused towards children, or equitably felt between them. For understandable historical reasons, social protection targets war veterans and the elderly to a far greater degree than children. Meanwhile, in education, a PER would provide better evidence on the targeting of public support to preschools and, importantly, which groups are benefitting from this support. Municipal/city and entity expenditure on ECD should be monitored and allocations adjusted so that children can reap greater benefits from public expenditure.
- **Sub-recommendation 2: Undertake a fiscal space analysis.**²³⁴ Currently, under-investment in the sectors most relevant to ECD (health, education, and social protection) is a challenge. In education, for example, expenditure on education as a proportion of GDP is below international benchmarks. Further, of particular concern, public budgets for these sectors are not oriented towards young children. To understand the feasibility of investing in ECD, the potential financing gap based on the cost estimates of this study, and which actors (government, private etc.) at which level (municipality/city, entity) are responsible for financing, an in-depth analysis of fiscal space is required. This type of evidence would help to identify potential areas to increase budgetary room for spending on ECD services (including through taxation, overseas development aid, or debt). It could be conducted by a

government agency or facilitated by a development partner, such as UNICEF.

- **Sub-recommendation 3: Maximize the allocative efficiency in the use of public budgets by reallocating financing towards young children and protecting expenditure on children from budget cuts.** Despite the ageing demographic, investments must be channeled towards services for children – as they are the best hope for long-term development. However, currently, the proportion of public budgets spent on the social sectors in RS is below international targets and regional averages. In education, for example, it is estimated that only a small fraction of already low education budgets is being spent on ECEC. This study has found that the costs of scaling up critical ECD services (such as a universal child benefit) are demanding; therefore, it will be important to utilize public funds strategically, effectively, and efficiently. On the basis of the PER and fiscal space analysis for ECD, public budgets should be reoriented towards investments in the social sectors. Further, social sector budgets themselves should also be optimized towards benefitting young children where the returns on investment are likely to be greatest. In practice, this might mean developing specific budget lines or programmes within sectoral budgets that are targeted at young children (e.g., for ECEC). It may also involve moving public funds from the provision of primary and secondary education (which has declining demand owing to falling child populations) towards pre-primary level, for example. In the health sector, a tangible example of these changes would be the revision of budgets to include budget lines related to demand generation for immunization and nutrition promotion programmes.
- **Sub-recommendation 3.1: Establish child-friendly budgeting.** Building on the evidence from the fiscal space analysis as well as the evidence generated in this report, RS can create a multi-year financing plan for children with a range of financing options, including potential regional support from the EU, public-private partnerships, and earmarked tax. Moreover, in order to implement child-friendly budgeting, RS would need to introduce new tools for budget classification and coding for children, as well as shifting towards programme-based budgeting. Specific indicators to assess and monitor allocations for children would be needed, in addition to strategic budget lines which are prioritized and protected in times of crisis. Child-friendly budgeting will better allow the key decision-makers in RS to monitor, prioritize, and increase budgetary allocations for children and protect the sector from budget cuts.

²³⁴ A recent fiscal space analysis for the social sectors (particularly ECD) was undertaken by the UNICEF Rwanda Country Office in 2022. It provides a good example of how such forms of analyses can be used to understand the financing gap, and potential avenues for investment, in the social sectors. UNICEF Rwanda (2022). *Fiscal Space Analysis for Social Sectors in Rwanda*, (UNICEF: Kigali, Rwanda)

- **Sub-recommendation 4: Prioritize investment by cost-effectiveness and impact.** Firstly, gather robust evidence about the impact of state-sponsored interventions over a number of years. Then, prioritize investments in services which will have the highest social and/or economic returns or with the biggest gaps. The financial resources required to scale-up ECD services are extensive and, in the short-term, stakeholders should work to prioritize and focus on the interventions which might reap the greatest returns. In the health sector, one such quick win would be to make amendments to the vaccination calendar. Further, stakeholders might also look to prioritize investments in promoting breastfeeding or the case management of premature babies (which were found in this study to be the most effective health and nutrition interventions measured).
- **Sub-recommendation 5: Maximize technical efficiency in the provision of services, by looking for ways to reduce costs in the provision of services, without jeopardizing quality.** Concrete examples of activities that could take place include: integrating service provision, strengthening public financial management (PFM) systems to improve budget execution, strengthening monitoring and internal control functions, or carrying out public expenditure reviews in the social sectors. Governments should also use opportunities from demographic trends to facilitate efficiency. For example, as child populations decline, repurposing primary and secondary school classrooms may reduce the capital costs of scaling up ECEC. Further, additional budgetary room will be made available as fewer children require primary and secondary school services, meaning this funding could be reallocated to the ECEC level. Meanwhile, in the health sector, early childhood detection and interventions for children with developmental delays should be integrated into regular primary healthcare services. This would reduce costs and ensure better efficiency and access.

Recommendation 3: Develop strong partnerships with the private sector. Achieving ambitious targets to scale up ECD services will require close collaboration with the private sector. Businesses are already an important part of the ECD landscape in Republika Srpska, particularly in the provision of ECEC. In order to mobilize the financial, infrastructural, and human resources required to make access to ECD universal, mutually beneficial public-private partnerships must be cultivated.

- **Sub-recommendation 1: Set up an entity-wide ECD Working Group** with stakeholders in the public and private sectors. Their aim would be to smooth collaboration between private and public engagement in ECD, motivating for action in the space, as well as providing a space for consultation. This Working Group would be tasked with providing input into policy, encouraging better consultation and collaboration between private and public actors, and identifying challenges or concerns. This will be of particular relevance for ECEC; however, facilitating closer dialogues between the public and private sectors may also be of use in the health sector. The agenda for improving childhood nutrition, for example, will rely on close collaboration with private sector providers of breast-milk substitutes, as well as complementary foods for young children.
- **Sub-recommendation 2: Craft policies designed to ensure adequate support for both public and private providers of ECEC services.** Demand for ECEC is high and, currently, far outstripping the ability of the public sector to provide. Public finances for ECEC can be used to support the provision of ECEC within the private sector. This might include: (i) subsidizing fees for parents/caregivers with children enrolled in private preschools; (ii) providing direct grants to private preschools to expand and increase accessibility; (iii) reducing tax rates for private preschools; and (iv) providing non-monetary support to private preschools, such as making public spaces available for use as a preschool. The legal feasibility of public-private partnerships should be closely considered when planning this collaboration.

- **Sub-recommendation 3: Create a multi-year operational and financial plan for children to support the link between policy and implementation.** A critical link between policy and implementation will be the creation of operational plans for ECD for the entity. These plans should specify targets and activities, time horizons, and the roles and responsibilities of different stakeholders (private and public), and at different levels (municipal/city, entity). Importantly, this multi-year plan should have a strong focus on financing with plans in place to facilitate adequate financial resources (from both the public and private sectors) being made available for plans to be implemented. A range of financing options should be considered in these plans to maximize the speed of the scale up, including innovative financing options (such as blended financing²³⁵ or results-based financing²³⁶).

Recommendation 4: Regulate and monitor quality standards of ECD services. Whilst access to many ECD services is fairly widespread, quality remains a critical concern. In the health sector, this has contributed towards hesitancy in the uptake of essential services, whilst in the provision of ECEC there is a lack of oversight and enforcement of standards or regulations. Quality must be a focus for ECD stakeholders to ensure that the full benefits of scaling up coverage are to be realized. In ECEC, for example, evidence shows that low-quality service provision will not result in the positive impacts on child development modelled in this study.²³⁷

- **Sub-recommendation 1: Bodies' monitoring and regulation of service provisions need to be strengthened.** In ECEC, for example, a centralized unit, such as the Republika Srpska Pedagogical Institute, must be strengthened to support routine spot checks and comprehensive inspections to ensure quality and adherence to standards in public and private facilities. Further, evaluation and assessment systems in ECEC need to be established. This refers to the appraisal of the work of preschool teachers (including through self-assessment), preschool institutions' self-evaluations, and evaluations on the system level to ensure quality.

- **Sub-recommendation 2: Monitoring services need to link closely with practical support to improve quality.** In ECEC, for example, below-average evaluation and assessment scores should be routinely linked to entity bodies that are able to deliver direct and implementable support to ensure a swift return to minimum standards. This additional level means that underperformance is matched with differentiated support.

Recommendation 5: Mainstream equity and inclusivity. For the rights of all children to be equitably realized, responsive and intentional policy-making must recognize the differences between children and cater for them accordingly. Republika Srpska has a system with striking vertical and horizontal inequities. For young children, this has manifested in significant variation in access to the quality services needed (especially for Roma children, children from low-income and/or rural backgrounds, and CwD). Analyzing trends in coverage data, it is clear that equity considerations need to be put at the heart of future decision-making. Policies must address the supply and demand side in order to ensure that all children have access to the services they need to survive and thrive.

- **Sub-recommendation 1: Policy and programme design for young children must be inclusive** and focus on reaching the furthest behind first. In ECEC, for example, public funding should be used to target children who are vulnerable to exclusion or have additional needs. In practical terms, on the demand side, this might include providing fee exemptions to children from rural areas, low-income or Roma backgrounds, refugee/migrant children, or those with CwD. Additional support to overcome access barriers might also be deployed, including providing transportation, as well as information campaigns to sensitize communities on the value of ECEC. On the supply side, this could involve additional subsidies given to preschools to support them in their care and education of CwD. This would be aimed at incentivizing the provision of high-quality services and focusing public funding on areas with lower enrolment or attendance.

- **Sub-recommendation 2: Stakeholders must strongly advocate and make the economic and rights-based case for the need to tackle inequities in early childhood.** Strategically targeting financing towards the gaps in ECD will have an impressive rate of return. Extending social protection interventions to cover more vulnerable children, for example, has the potential return on investment of almost four times (and over six times for a universal child allowance) that spent 2052. It will not be enough to rely on these economic arguments to stimulate support for inclusive

235 Blended financing refers to a combination of ODA with public and private resources, generally with the aim of mobilizing development finance from different sources.

236 Results-based financing refers to any program or intervention that provides rewards to individuals or institutions after agreed-upon results are achieved and verified.

237 K. Sylva, E. Melhuish, P. Sammons, I. Siraj-Blatchford and B. Taggart (2011). 'Pre-school quality and educational outcomes at age 11: Low quality has little benefit', *Journal of Early Childhood Research*, 9:2, pp. 109-124

programming and policy. In some cases, policies designed to tackle inequities can be expensive and appear to have lower returns. The argument for their implementation must instead be made on the basis of rights and social justice. For instance, our analysis indicates that the existing child allowance has already reduced inequality amongst residents of RS. Therefore, expanding the coverage and adequacy of the child allowance can be advocated for on the basis of equity. Here, stakeholders should take advantage of opportunities presented by BiH's bid for accession to the EU, with the EU Commission ruling that BiH must improve its record in assuring child rights and protection of vulnerable groups.

- **Sub-recommendation 3: The financing architecture underpinning the provision of ECD services must be reconsidered** – OOP payments (formal and informal) need to be eliminated to reduce barriers to access for core ECD interventions. Financing of ECD services in RS is often regressive, putting more pressure on poorer and more vulnerable households. ECEC services, for example, have high OOP payment requirements for enrolment, meaning that only those children from households with parents/caregivers in employment are likely to attend. These household contributions represent a barrier for more vulnerable children to access the care they need, thus embedding inter-generational poverty and inequity. Public finance must be used to support a more progressive financing system, and OOP spending must slowly be reduced and eliminated, especially for poorer and more vulnerable groups.

Recommendation 6: Support data and information collection, management and dissemination. Chronic data scarcity threatens progress in the ECD sector. Comprehensive data on the coverage of core ECD interventions has not been collected and disseminated since the MICS 2011/12 study, which makes it exceptionally difficult to understand the status of young children (and has been a limitation for this study). For the impressive benefits of ECD to be reaped in Republika Srpska, a positive enabling environment must be developed. Data and evidence are a core component of functioning ECD systems. Without reliable, high-quality, and up-to-date information, it is difficult (if not impossible) for policy-makers to engage in strategic planning, costing, implementation, and monitoring of services for young children. Implementing practical reforms to the data systems related to ECD will be critical to ensuring rapid progress can be made towards improving service coverage.

- **Sub-recommendation 1: Government stakeholders from across the entity should set up an ECD Data Working Group, tasked with improving data systems for ECD.** Clear lines of reporting must be set up to prevent duplication in data collection and management. Roles and responsibilities for data collection related to ECD should be determined, with clear parameters and mandates given to stakeholders at municipal/city and entity level. These roles should be standardized across the entity, in order to facilitate clarity, simplicity, and accountability in data collection systems.
- **Sub-recommendation 2: Data related to a common list of ECD indicators must be routinely collected.** Stakeholders in the ECD Data Working Group must commit to routinely collecting information on a set of multi-sectoral ECD interventions. These data would relate to coverage and quality of essential health and nutrition services, evidence on enrolment and attendance at ECEC, and information related to multi-dimensional child poverty. Stakeholders should have a schedule for the collection of these data (annual or biannual) and to upload them to a central digital database that is open and accessible.
- **Sub-recommendation 3: A central digitized open-access database should be developed to facilitate monitoring and evaluation.** Data systems must be streamlined to improve quality and efficiency. The digitization of data systems would improve data sharing, management, and dissemination. Stakeholders must develop a simple, central database where users are able to upload data collected or review reports. This would reduce inefficiencies, prevent duplication, and enable far greater accountability and monitoring within the sector.
- **Sub-recommendation 4: A government body, such as the Republika Srpska Institute of Statistics, at entity level should be given clear responsibilities in data governance for ECD.** Their role would include ensuring lines of reporting are set up, data collection standards are enforced, and requirements on collection and dissemination are upheld at all administrative levels. Their role would also be to manage the central data warehouse for ECD, ensuring that government stakeholders are equipped to report using this tool, and that access to the public is open and transparent. An annual report on indicators related to ECD, and service coverage, could be produced to help track progress.

- **Sub-recommendation 5: Republika Srpska should look to undertake a new Multiple Indicator Cluster Survey (MICS) as soon as possible** to improve the accuracy of data for strategic planning in the ECD sector. Moreover, the regular collection of household budget and expenditure data will also assist in understanding child poverty and support evidence-based policy and budget planning.
- **Sub-recommendation 6: Create an enabling environment for the digital transformation of the public sector.** This requires the set-up of a Management Information System (MIS), for cross-referenced and integrated data management, as well as for digitizing information that currently exists in hard copy across the social sectors affecting ECD. However, this also requires more funding to be channeled towards the creation of this digital infrastructure and the reskilling of social protection workers to be able to use the system efficiently and effectively. In the longer term, this investment is likely to pay off by improving the ability to target vulnerable households, providing oversight of the entire social protection system, and improving linkages and coordination between separate bodies.
- **Sub-recommendation 3: Stimulate grass-roots campaigns to demand quality services,** including breastfeeding support or setting up preschools where none currently exist. Demand generation will be an important component of facilitating the kind of rapid scale-up in the coverage of core ECD interventions modelled in this study. Local community engagement will be required to change attitudes and encourage the uptake of interventions. This is particularly important in areas such as healthy infant and childhood nutrition and ECEC enrolment. Information campaigns about early childhood development screenings and interventions before the age of three should be of particular focus. Further in ECEC, local communities might engage through running local campaigns, raising funds to set up local preschools, or setting up services that remove barriers to access (such as pooled transportation for young children to preschools).
- **Sub-recommendation 4: Lesson learning and sharing of experiences between municipalities/cities should be encouraged.** This could be achieved through the ECD Working Group or by publishing the results of initiatives online.

Recommendation 7: Mobilize community action and draw on innovative local solutions. Changing legislation, re-prioritizing public financing, and strengthening systems can be slow processes. Impeded by dense bureaucratic structures, the types of policy change recommended here may not be feasible in the short term. However, as outlined in this report, investments in ECD must start now if their full benefits are to be reaped. For this reason, a hybrid approach must be taken in which rights-based arguments must be combined with robust evidence on the return on investment, as well as stakeholder mobilization demanding quality services at local and community levels.

- **Sub-recommendation 1: Municipal/city governments and stakeholders should create programmes within their mandate to support young children.** This might include running information campaigns on breastfeeding promotion, positive parenting, or immunization, or creating financial partnerships with private ECEC providers.
- **Sub-recommendation 2: Development partners should provide funding to grass-roots organizations or municipal/city governments that are innovating in the ECD sector.** Grants, for example, might be given to support the trialing of community-based ECEC programmes or redeveloping spaces for ECEC classrooms for children from rural areas.

TABLE 31: RECOMMENDATIONS SUMMARY TABLE

| ECD Recommendation | ECD Sub-Recommendation | Priority Level ²³⁸ | Time Horizon ²³⁹ |
|--|---|-------------------------------|-----------------------------|
| Strengthen and harmonize policy and legal structures | Enforce and harmonize existing legislation and policies. | | |
| | Close any remaining legislative gaps. | | |
| | Support human capital capacities and infrastructure to implement legislation and policies. | | |
| Optimize the use of public budgets for human capital development | Analyze trends in public expenditure on ECD. | | |
| | Undertake a fiscal space analysis. | | |
| | Maximize the allocative efficiency in the use of public budgets by reallocating financing towards young children and protecting expenditure on children from budget cuts. | | |
| | Prioritize public investment by (cost-)effectiveness. | | |
| | Maximize technical efficiency in the provision of services, by looking for ways to reduce costs in the provision of services, without jeopardizing quality. | | |
| Develop strong partnerships with the private sector. | Set up an entity-wide ECD Working Group. | | |
| | Craft policies designed to ensure adequate support for both public and private providers of ECEC services. | | |
| | Create a multi-year operational and financial plan for children to support the link between policy and implementation. | | |
| Regulate and monitor quality standards of ECD services | Bodies' monitoring and regulation of service provisions need to be strengthened. | | |
| | Monitoring services need to link closely with practical support to improve quality. | | |
| Mainstream equity and inclusion | Policy and programme design for young children must be inclusive. | | |
| | Stakeholders must strongly advocate and make the economic and rights-based case for the need to tackle inequities in early childhood. | | |
| | The financing architecture underpinning the provision of ECD services must be reconsidered. | | |

²³⁸ Darker shades refer to higher priority levels. Тамније нијансе

²³⁹ Darker shades refer to longer time horizons.

| ECD Recommendation | ECD Sub-Recommendation | Priority Level ²³⁸ | Time Horizon ²³⁹ |
|---|--|-------------------------------|-----------------------------|
| Support data and information collection, management and dissemination | Government stakeholders should set up an ECD Data Working Group, tasked with improving data systems for ECD. | High | Short |
| | Data related to a common list of ECD indicators must be routinely collected. | High | Short |
| | A central digitized open-access database should be developed to facilitate monitoring and evaluation. | Medium | Long |
| | A government body, such as the Republika Srpska Institute of Statistics, should be given clear responsibilities in data governance for ECD. | Low | Medium |
| | RS should look to undertake a new Multiple Indicator Cluster Survey (MICS) as soon as possible to improve the accuracy of data for strategic planning in the ECD sector. | Medium | Medium |
| | Create an enabling environment for the digital transformation of the public sector. | Medium | Medium |
| Mobilize community action and draw on innovative local solutions | Local governments and stakeholders should create policies within their mandate to support young children. | High | Medium |
| | Development partners should provide funding to grass-roots organizations or local governments that are innovating in the ECD sector. | Low | Medium |
| | Stimulate grass-roots campaigns to demand quality services. | Low | Medium |
| | Lesson learning and sharing of experiences between municipalities/cities should be encouraged. | Low | Long |

