

# The impact of the war in Ukraine and subsequent economic downturn on child poverty in Eastern Europe and Central Asia



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This brief undertakes a regional analysis of the impact of the war in Ukraine – and subsequent economic downturn – on the situation of children in Eastern Europe and Central Asia. UNICEF ECA and UNICEF Innocenti – Global Office of Research and Foresight examine the impacts on child poverty, school years lost, and infant mortality.

Based on a demographic snapshot of the region, our models predict that an additional 10 million people – including about 4 million children – will be pushed into poverty compared to pre-war predictions. About 4,500 more children will die before their first birthday, and 117,000 years of schooling will be lost. The brief concludes with implications for the work of UNICEF and government partners in addressing these poverty risks.

## Background: a tale of at least two crises

For the countries in Eastern Europe and Central Asia (ECA) region, specifically, but for numerous other countries reliant on food (wheat and grains), fertilizer, fuel supplies, trade, tourism, remittances etc. – either from or through the Russian Federation and Ukraine – the economic downturn related to the war in Ukraine follows closely on the heels of the COVID-19 pandemic, and a series of other country specific economic shocks.

Over the past two decades, the ECA region overall was growing economically. Despite four notable economic crises since 2006, real GDP per capita (USD PPP) in the ECA region

has increased from around 16,500 (2006) to USD 23,600 (2022). Yet this trend hides how countries in ECA have been hit hard by crises, and growth has been repeatedly stifled.

The global financial crisis (2008), the annexation of Crimea (2014) and the subsequent devaluation of the rouble (2015), and COVID-19 (2020), have all led to widespread disruption of markets and supply chains, falls in remittances, and falls in economic growth in the ECA region – and with serious implications for child poverty risks.

This is now true for the war in Ukraine. Estimates using the International Monetary Fund (IMF) growth forecasts from October 2021 and April 2022, shows that, in the absence of the war, the GDP per capita (USD PPP) for ECA would have reached \$24,700 in 2022 from \$23,300 in 2021. With the war, the GDP per capita (USD PPP) is still projected to increase for 2022, but only to \$23,600, essentially meaning the war and subsequent economic downturn has cost the region about USD 1,100 PPP per person for the 424 million population – or approximately USD 462 billion PPP in total.

In response to both COVID-19 and the war in Ukraine, ECA countries have responded with fiscal and social protection measures to mitigate the effects. However, there are key differences between the COVID-19 crisis and Ukraine crisis – including refugee flows (the responses to this are coming from the international community), and in general, more limited fiscal and social protection responses at the national level call for sometimes unique, and sustained forms of social protection.

## What are the impacts on the situation of children and child poverty in the region?

The region-wide effect of the economic downturn is truly a crisis for the poor, and a crisis for millions of children. This is because across the region and within countries, the effects of the crisis – and specifically falls in remittances, and increases in food and fuel prices – are not experienced equally. Families with a higher reliance on remittances, and who spend a greater proportion of their incomes on necessities such as fuel and food – primarily the poor and those with more dependents – will be hit the hardest everywhere.

Even though the drivers of each economic downturn are different, for the children and their families they affect, many of the economic and social consequences are the same. The most recent evidence from COVID-19 shows that as economic conditions in the region worsen, outcomes for children also deteriorate, leading to increased poverty risks, weaker school attachment, and increased infant mortality amongst other things (Richardson et al, 2020).

The current crisis is now piling on more misery for families and children, and worryingly is projected to be the starkest of all recent crises for the region. A key concern is that many countries in the ECA region are heavily reliant on Russian markets, and forecasts predict that the economic contraction related in 2022 will be the largest shock in the Russian Federation since the transformation crisis (1992) that followed the collapse of the Soviet Union (CEPR policy portal, 2022).

Specifically, the impacts of the war and subsequent economic downturn will be felt by children and families in three ways:

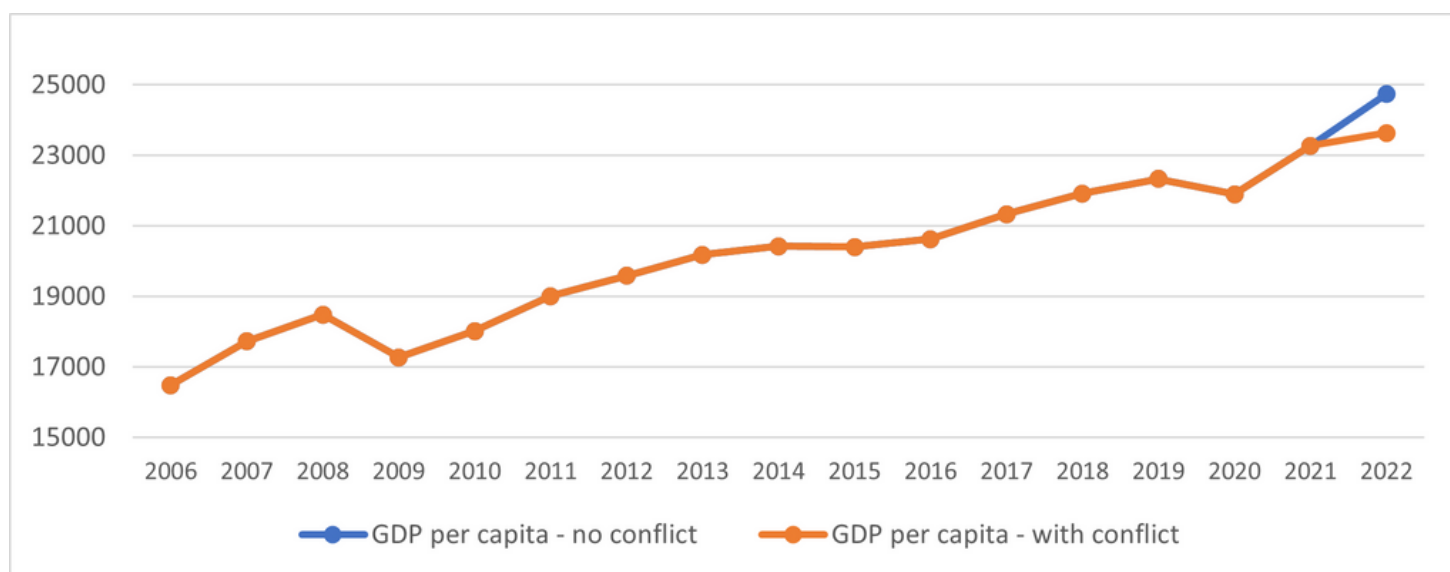
- Higher prices for basic goods (food and fuel) – with global effects – decreasing purchasing power, reducing real disposable incomes, increasing poverty risks.
- Disrupted trade and supply chains, and falling remittances, – affecting mostly neighbouring countries – are further increasing prices and lowering real household incomes directly.
- Increasing uncertainty in business and investment will tighten financial conditions, and risk capital outflows from emerging markets – worsening economic conditions in the long term, increasing poverty risks, and stifling recovery.

## How the economic downturn is projected to affect poverty risks, and education and health outcomes

UNICEF Innocenti has analysed national economic and social trends in the ECA region, from 2006 to 2021, to develop a model of how changes in national economic conditions (GDP per capita) predicts children's poverty risks, education (enrolment and learning outcomes), and health outcomes. Building on observed trends, and using IMF growth forecasts for 2022 prior to the war and after the war (see Figure 1), the evidence suggests that:

- **An additional 10.4 million people in the ECA region will go into poverty, including almost 4 million children (under 18s). Nearly three-quarters of these children are Russian even though the Russian Federation accounts for about one-third of the region's population (see Table 1). The increase in child poverty is about 19 per cent higher than the projected child poverty in the absence of the war and economic downturn.**
- **An additional 117,000 years of compulsory schooling will be lost – equivalent to an increase of 2 children in every thousand in the region missing a year of school altogether in 2022.**
- **In terms of infant mortality, an additional 4,500 children will die in 2022 before their first birthday (about 8 per 100,000 live births).**

Figure 1: Trend in GDP per capita (PPP) in ECA - 2006-2022



Source: Authors' computations based on IMF World Economic Outlook for October 2021 and April 2022.

Table 1: Demographic and economic snapshot – 2021

Country	Population (2021)	Number of children 0-17 (2021)	Children 0-17 as share of population (2021)	Number of children under 1 (2021)	Real GDP Per Capita (2021) in USD (PPP)
Albania	2,844,000	562,000	19.8	29,000	14,564
Armenia	2,780,000	667,000	24.4	33,000	13,345
Azerbaijan	10,363,000	2,882,000	27.8	123,000	14,457
Belarus	9,531,000	1,898,000	20.1	87,000	19,743
Bosnia and Herzegovina	3,229,000	580,000	18	27,000	14,573
Bulgaria	6,784,000	1,145,000	16.9	57,000	23,588
Croatia	4,030,000	687,000	17.1	35,000	29,986
Georgia	3,749,000	928,000	24.9	49,000	15,389
Kazakhstan	19,400,000	6,642,000	34.3	405,000	25,839
Kosovo	1,658,000	442,000	26.7	18,000	11,681
Kyrgyz Republic	6,630,000	2,620,000	39.5	154,000	4,823
Moldova	3,277,000	748,000	22.9	41,000	14,023
Montenegro	627,000	141,000	22.5	7,000	20,541
North Macedonia	2,097,000	402,000	19.2	20,000	16,372
Romania	19,656,000	3,781,000	19.3	200,000	30,689
Russian Federation	144,707,000	30,161,000	21	1,392,000	28,081
Serbia	7,222,000	1,242,000	17.2	66,000	19,695
Tajikistan	9,948,000	4,166,000	41.9	255,000	3,941
Turkmenistan	6,428,000	2,311,000	36	131,000	16,131
Türkiye	85,343,000	23,638,000	27.7	1,230,000	31,636
Ukraine	39,703,000	7,273,000	18.5	278,000	13,040
Uzbekistan	34,623,000	12,073,000	34.9	781,000	7,815
Total / Average	424,629,000	104,989,000	24.7	5,418,000	23,286.13

Source: World Population Prospects, 2022 revision; IMF World Economic Outlook, April 2022.

Table 1 presents a snapshot of some demographic characteristics and the real gross domestic product (GDP) (USD PPP) for 2021. The total population for the region is about 425 million out of which 105 million (25 per cent) are children aged 0-17 years. The weighted average real GDP per capita for the region was USD 23,300 in 2021, ranging from a low of USD 3,900 for Tajikistan to USD 31,600 for Türkiye. Sub-regional differences exist in the GDP per capita as well – ranging from about USD 12,300 in Central Asia to USD 25,600 in Eastern Europe.

Table 2 summarizes the modelled effect of the economic shock on poverty, infant mortality, and schooling for children ages 6-17 years. Annex A gives an overview of the modelling approach.

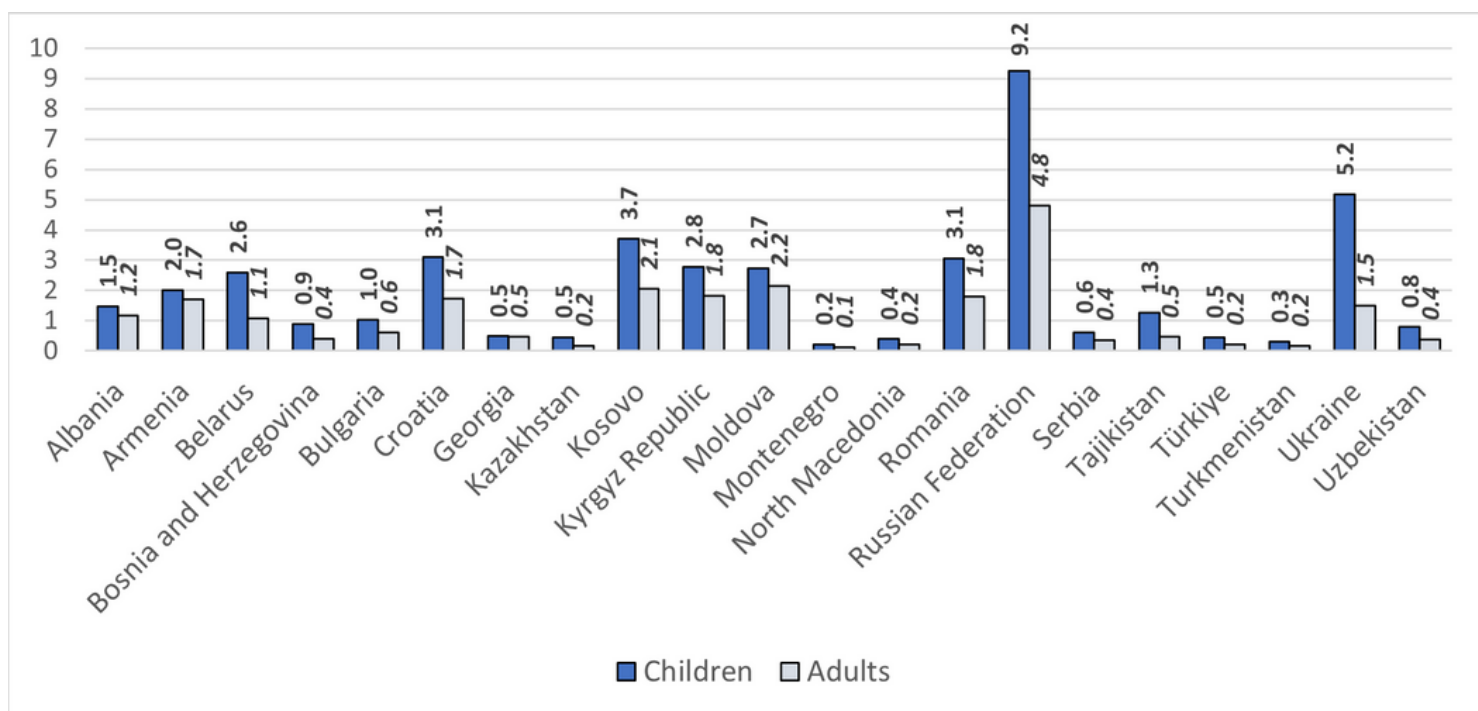
In total, an additional 10.4 million individuals (about 2.5 per cent of the total population of the region) will fall into poverty due to the economic shock related to the war in Ukraine. Children will bear the large share of the shock as an additional 4 million children aged 0-17 are projected to live in poverty.

This implies that children - who make up 25 per cent of the region's total population will account for 40 per cent of the increase in poverty. Put differently, an additional 3.6 per cent of children will experience poverty compared to 2 per cent of adults (Figure 2) – highlighting the higher poverty risk for children as has been the case in many crisis situations. In the absence of the war, an estimated 19.5 million children will have been in poverty which represents about 19 per cent increase in the child poverty rate.

In terms of infant mortality, an estimated additional 4,500 children will die before their first birthday (about 8 per 10,000 live births) due to the increase in poverty. Finally, it is projected that an additional 117,101 years of schooling will be lost (equivalent to about 2 per 1000 children not attending school) – also driven by increases in poverty.

All these estimates are in excess cases on top of the expected figures in the absence of the economic shock. For example, in the case of the infant mortality, an estimated 61,000 infants will have died in the absence of the shock, and the 4,540 is the excess.

Figure 2: Percent of children and adults who will fall into poverty due to the crisis, by country



Notes: These numbers mean that in Croatia for example, about 3 per cent of children will experience poverty compared to 1.7 per cent for adults. In Russia, 9.2 per cent of children will experience poverty compared to 4.8 per cent of adults. Azerbaijan not included because estimates do not suggest additional households will fall into poverty (see Table 2).

Sources: Authors' analysis of data from the IMF World Economic Outlook, April 2022.

Table 2: Estimated effect of economic shock on poverty, infant mortality, and schooling (children 6-17)

Country	Additional population going into poverty	Additional children going into poverty	Additional infant mortality	Additional years of schooling lost
Albania	35,413	9,061	19	743
Armenia	52,773	14,493	15	868
Azerbaijan**	-9,640	-3,946	-47	-3,314
Bosnia and Herzegovina	17,285	5,472	8	738
Bulgaria	47,441	12,383	6	1,452
Croatia	83,548	21,830	25	851
Georgia	17,360	4,255	30	1,054
Kazakhstan	51,364	28,004	53	7,451
Kosovo	41,450	16,354	14	114
Kyrgyz Republic	143,862	67,608	36	2,929
Moldova	60,293	13,650	50	601
Montenegro	913	305	6	163
North Macedonia	5,468	1,624	2	494
Romania	395,186	110,390	70	4,343
Russian Federation	8,365,237	2,876,591	2,268	37,52
Serbia	28,198	7,989	35	1,579
Tajikistan	75,426	50,638	169	4,844
Turkmenistan	12,098	6,463	36	2,604
Türkiye	252,260	109,063	974	29,079
Ukraine*	472,018	400,104	504	9,345
Uzbekistan	179,128	89,551	267	13,635
Total	10,327,081	3,841,882	4,540	117,101
Percentage of population exposed to event	2.48	3.72	0.08	0.22

Notes: Modelling considers the projected real GDP growth for 2022 in contrast to the real GDP growth for 2021, and the real GDP growth for 2022 in the absence of the war. Ordinary least squares regressions (pooled) are used to model the relationship between poverty, GDP growth, inequality, unemployment and consumer price index by country and year.

Effects on infant mortality and schooling are estimated through the effect on poverty (see Annex A). Belarus is not included because estimates are still under review. \*Model based on a 10 per cent drop in real GDP for 2022 relative to 2021.

Some estimates suggest the drop in GDP could be as high as 30 per cent. \*\*Azerbaijan is the only country projected to have higher growth than was anticipated before the war. This translates to reductions in poverty, infant mortality and years of schooling lost.

Sources: Author's analysis of the data from the IMF World Economic Outlook, October 2021, and April 2022.

The results above do not account for the specific needs of refugee families – rather they are aggregates based on reported population figures in previous years. However, refugee families will add to these numbers, and in line with Article 2 of the Convention of the Rights of the Child, any response to mitigate these effects – national or international – simply needs to include all children and their families.

## What are the implications for UNICEF's work, and for government policy responses?

The implications for UNICEF's work today, and into the future, are many. The role UNICEF should play, include:

- Through upstream engagement, provide all national policymakers with the rationale and evidence to expand social assistance benefits to all families with children in need, including refugees – to address poverty risks and their consequences. UNICEF Innocenti and ECARO are producing country-level studies to deliver on this recommendation. About 2 billion dollars of extra spending will be required to protect the 4 million children at risk of poverty over the next year.
  - Continue to highlight the importance of – and protect and support the delivery of – health, nutrition, and social care services to pregnant mothers, infants, and pre-schoolers, despite economic pressures. Social protection benefits, including family friendly service provision, can help in reducing out-of-pocket costs and labour market detachment associated with accessing health care for children and their parents.
  - Acknowledge how household conditions and poverty can drive detachment from school, particularly for children who are at risk of child labour, and provide the necessary evidence and available support to help countries prevent school dropouts and drops in learning outcomes. Social protection benefits, transport subsidies and school meals, can all play a role in reducing the transaction costs experienced by families sending children to school.
  - Compounding crises have pushed up government borrowing, and subsequently created inflationary pressures on interest rates – making borrowing less affordable. This trend usually leads to austerity measures that triggers cuts to social protection spending. In the longer-term, UNICEF needs to continue to advocate in the strongest terms for ringfencing child and family benefits and services (of all kinds) in the case of fiscal consolidation / budget cuts. Short term savings derived from reducing investments on future generations will have the largest long-term social costs. Some of the proposals in the [call for action](#) in response to COVID-19 are still relevant.
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## Annexes

### A: Methods

The modelling of the relationship between GDP growth and poverty follows the approaches proposed by Fosu (2017) and discussions by Ferreira et. Al (2022). Using data from 2000 to 2021, we estimate the poverty reduction effect of GDP growth in the ECA, controlling for inequality. The estimated coefficients are then applied to estimate the reductions in poverty under two growth scenarios – the projected GDP growth in the absence of the war, and the revised projections after the start of the war and the subsequent economic downturn. Furthermore, we explore the relationship between consumer price index and poverty – to be able to account for the cost of living crises despite projected positive growth. The additional poverty figures reported represent the difference in the two scenarios.

The effects on schooling and infant mortality rate are estimated through the relationship between these two variables and poverty. Our estimates show, for example, that a 1 percentage increase in poverty is associated with an increase of about 2 infant deaths per 100,000 live births, and a reduction in learning adjusted years of schooling by 0.05. Applying this for various countries produces the country level estimates which are weighted by population to arrive at the regional figures.

### B: References

- CEPR Portal (2022) War-induced food price inflation imperils the poor | VOX, CEPR Policy Portal (voxeu.org)
- Ferreira, I.A., V. Salvucci and F. Tarp (2022). 'Poverty, Inequality, And Growth: Trends, Policies, And Controversies'. WIDER Working Paper 2022/43. Helsinki: UNU-WIDER.
- Fosu, A.K. (2017). 'Growth, Inequality, and Poverty Reduction in Developing Countries: Recent Global Evidence'. *Research in Economics*, 71(2): 306–36. <https://doi.org/10.1016/j.rie.2016.05.005>.
- International Monetary Fund. 2021. *World Economic Outlook: Recovery during a Pandemic—Health Concerns, Supply Disruptions, Price Pressures*. Washington, DC, October
- International Monetary Fund. 2022. *World Economic Outlook: War Sets Back the Global Recovery*. Washington, DC, April
- Richardson, D., Cebotari, V., Carraro, A., Damoah, K. A. (2020). *Supporting Families and Children Beyond COVID-19: Social protection in Southern and Eastern Europe and Central Asia*, UNICEF Office of Research – Innocenti, Florence.
- United Nations, Department of Economic and Social Affairs, Population Division (2022). *World Population Prospects 2022*, Online Edition

## UNICEF EUROPE AND CENTRAL ASIA

UNICEF Europe and Central Asia works with and for children and adolescents across 21 countries and territories in where we have country programmes. We also respond to the needs of refugee and migrant women and children in Austria, Germany, Greece and Italy, and engage with institutions across many more countries to uphold the rights of children. Since the outbreak of war, UNICEF has scaled up and expanded its humanitarian response for children in Ukraine and refugee-receiving countries including the Czech Republic, Hungary, Poland, and Slovakia

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### About this brief

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