

A rapid review of economic policy and social protection responses to health and economic crises and their effects on children

Lessons for the COVID-19 pandemic response

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A RAPID REVIEW OF ECONOMIC POLICY AND SOCIAL PROTECTION RESPONSES TO HEALTH AND ECONOMIC CRISES AND THEIR EFFECTS ON CHILDREN

LESSONS FOR THE COVID-19 PANDEMIC RESPONSE

Nyasha Tirivayi, Dominic Richardson, Maja Gavrilovic, Valeria Groppo, Lusajo Kajula, Elsa Valli
and Francesca Viola.

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ACRONYMS

CCT	conditional cash transfer
COVID-19	coronavirus disease 19
EVD	Ebola virus disease
GDP	gross domestic product
H1N1	influenza A virus subtype H1N1
HIC	high-income country
HMIC	high- and middle-income country
ILO	International Labor Organization
LAC	Latin America and Caribbean
LMIC	low- and middle-income country
MERS	Middle East Respiratory Syndrome
MIC	middle-income country
SARS	Severe Acute Respiratory Syndrome
SSA	sub-Saharan Africa
UNICEF	United Nations Children's Fund
UNDP	United Nations Development Programme
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

Purpose

This rapid review seeks to inform initial and long-term public policy responses to the COVID-19 pandemic by assessing evidence on past economic policy and social protection responses to health and economic crises and their effects on children and families. The review focuses on virus outbreaks/emergencies, economic crises and natural disasters which, similar to the COVID-19 pandemic, were rapid in onset, had wide-ranging geographical reach, and resulted in disruption of social services and economic sectors without affecting governance systems. Lessons are also drawn from the HIV/AIDS pandemic due to its impact on adult mortality rates and surviving children. The evidence provided by this review is intended for uptake by policy makers and academic researchers.

What were the economic policy and social protection responses to past crises?

Evidence shows that past health and economic crises had wide-ranging negative socio-economic impacts on child and family well-being, including on physical and mental health, schooling, poverty, food security, livelihood, infrastructure and social services. However, public policy responses to virus pandemics/outbreaks (apart from HIV/AIDS) were limited compared to policy responses to previous economic crises and natural disasters. The 2007–2008 global financial crisis provides useful insights as it included a short phase characterised by expansionary fiscal and social protection responses, followed by a longer phase of austerity measures. Expansionary responses were mainly predicated upon economic stimulus packages and pre-existing statutory social assistance (mostly cash transfers) and insurance programmes or plans, mostly in high- and middle-income countries. In sub-Saharan Africa, temporary social transfers and public works programmes were introduced, and in some countries, pre-existing school feeding programmes were scaled up. However, responses were constrained by weak social protection systems, low pre-existing coverage and decreased revenues. Some responses were gender blind/discriminatory as they favoured sectors dominated by men or excluded young men mostly affected by the recession-induced unemployment. Evidence also shows that one-off/emergency and pre-existing cash transfers have been a popular response to droughts and natural disasters such as tsunamis and earthquakes.

Economic policy and social protection responses to past crises: Primary and secondary effects on children

Evidence shows that during crises, economic stimulus responses reduce poverty and protect family income, while austerity measures have detrimental impacts on childcare, parental caregiving, adult mental health, home ownership, crime and the prevalence of infectious diseases. Social insurance programmes like health insurance safeguard health care utilization and weather insurance protects assets and agricultural production while unemployment benefits alleviate poverty, although there is the risk they can contribute to long-term unemployment. Most studies show that social assistance instruments, including cash transfers, have wide-reaching positive impacts on child and family outcomes such as school attendance, poverty reduction, food security, emotional well-being and family livelihoods during crises. Design elements like targeting, coverage, transfer value and duration/intensity mediate the impacts of social assistance schemes during crises. However, the impact of cash transfers on child nutritional status is mixed, similar to evidence from non-crisis contexts. In high income countries (HIC), active labor market programmes attenuate negative impacts on family poverty and unemployment, suicides, and mental health among adults and parents. In low- and middle-income

countries (LMIC), public works programmes increase household incomes and reduce poverty. Social services reduce child mortality and increase education attainment.

Research implications

Overall, available evidence on the effects of economic policy and social protection responses is uneven across outcomes, regions, and the type of policy response because a large body of literature focuses on social assistance programmes. Future research on the COVID-19 pandemic can prioritize the voices of children and the marginalized and assess the effects of expansionary and austerity measures. It can also examine the role of several factors: social protection programme design and implementation; social care services; pre-existing macro-level demographic and health conditions and the diverse regional health and economic impacts of the pandemic.

Key lessons for public policy responses to the COVID-19 pandemic

Policy responses to past health and economic crises provide the following lessons for the COVID-19 pandemic response:

- **Economic stimulus and social protection responses must be child-sensitive and gender-responsive to achieve sustainable impacts on well-being.**
 - Pandemic planning has typically not addressed the needs of children; needs not institutionalized in social protection systems and which favour other demographics (especially in high income countries). The evidence shows that child-specific and age-sensitive fiscal and social protection policies can mitigate the longer term effects of crises and spur human capital development. In particular, social transfers and school-based measures (subsidies/meals) are effective in protecting children’s direct needs – health, nutrition, schooling – during past crises and mitigate the negative effects, not only in the short term but in the longer period (two+ years from response), although the majority of the available evidence is for LMIC. Gender inequality must also be addressed as it is often exacerbated during crises like the COVID-19 pandemic as women lose their jobs, gain additional care responsibilities, lack assets, and experience gender-based violence (secondary to social distancing health measures).

- **Governments can leverage pre-existing social protection infrastructure and expansionary stimulus packages to expand coverage and introduce new social protection programmes.**
 - Evidence shows that pre-existing statutory social protection programmes and reform processes enable a rapid social protection response during crises. Short-term responses often include the raising or top-up of benefit levels and the extension in duration of programmes or the introduction of new programmes. Long-term responses typically include permanent countercyclical reforms for social benefits, addressing sustainability and ensuring the transitioning of new programmes to permanence. However, the capacity to leverage pre-existing social protection programmes varies across regions. For instance, LMIC are still in the process of building permanent/statutory programmes and rely on short-term/non-statutory social protection programmes. In LMIC, short-term emergency social protection responses to the COVID-19 pandemic can be extended into permanent programmes or be combined with transitions into permanent programmes.

- **Near-poor or newly poor informal workers and at-risk families and children must be included in the social protection response to avoid entrenching poverty among these groups.**
 - The evidence shows that social protection instruments with fixed targeting criteria (e.g., cash transfers) do not always account for the newly poor or at-risk populations and pre-existing programmes usually exclude informal workers and immigrants. Emerging evidence suggests that the COVID-19 pandemic has substantially increased the number of poor people, particularly in sub-Saharan Africa and some middle income countries (MIC), necessitating the need for social protection responses to cover newly poor and at-risk or near-poor families and children, including informal workers and immigrants. Public works programmes in LMIC and MIC are a good example of an instrument responsive to the non-poor or newly poor due to their self-targeting approach.

- **Targeting of social protection responses should be effective and efficient and not add to the administrative burden.**
 - The evidence shows that in contexts where universal provision is not feasible, targeting the right vulnerable groups increases the effectiveness of social protection responses. However, poverty-targeting methods can increase costs and the administrative burden.

- **There is a risk that expansionary fiscal and social protection responses to a severe crisis are followed by austerity policies detrimental to child well-being.**
 - The COVID-19 pandemic brings twin crises – health and economic – that will likely have long-lasting economic effects in all countries, especially low income countries. Current economic stimulus and social protection responses to the COVID-19 pandemic are expansionary, but there is a high risk that financial austerity will be used to control budget deficits and consolidate debt, similarly to the global financial crisis experience.

- **Health systems must be strengthened during pandemics and severe shocks to ensure access to regular healthcare services by the general population and vulnerable groups (pregnant women, individuals with pre-existing medical conditions, young children).**
 - Evidence shows that investment in health services improves child health by reducing child mortality. Health measures for controlling outbreaks should be accompanied by social protection measures as the lack of social protection coverage perpetuates a vicious cycle of poverty and deprivation that diminishes health.

- **Building links between social protection and complementary interventions enables holistic responses to a pandemic/crisis with detrimental multi-generational impacts on adults, parents, children and the elderly.**
 - Lessons from the HIV/AIDS pandemic show that holistic HIV/AIDS programmes that integrate social protection with strong healthcare services, social work and child protection services can effectively address the multi-dimensional impact of illness and death on children in various situations, an approach that should be considered for COVID-19 responses, especially among socio-economically disadvantaged populations.

1. INTRODUCTION

This is a rapid review of global evidence on the nature and effects of economic policy and social protection responses to previous health and economic crises on families and children. This review is part of a larger comparative study entitled '*Social protection for families and children: Considerations for a post- COVID-19 response*' which seeks to assess initial policy responses to the COVID-19 pandemic taken by countries to date and to determine what social protection responses we might expect to see in different countries to safeguard children and their rights, based on national preconditions (social, economic and in terms of public policy practice) and exposure to COVID-19.

The overall purpose of this review is to inform initial and long term public policy responses to the COVID-19 pandemic. The main objective of our review is to preliminarily assess evidence on: i) how and which economic policies and social protection measures were utilized to respond to previous crises; and ii) the effects of economic and social policy responses on children and their families. The review focuses especially on social protection, given it mitigates the effects of crises by protecting the monetary resources of households. This review is not intended to be exhaustive but highlights previous lessons from implementing public policy responses to past crises and disasters and also contributes to the larger comparative study mentioned above. The intended audience of this review is policy makers and academic researchers.

The global COVID-19 pandemic has been described as a 'once-in-a-century phenomenon' and its global reach and potentially devastating toll on mortality compared to the 1918 Spanish Flu. While the COVID-19 pandemic is not comparable to recent crises, past experience can provide useful insights to inform current and future policy responses. Our review focuses on health and economic crises and natural disasters with attributes comparable to those of COVID-19: they were rapid in onset, had wide-ranging geographical reach, and resulted in disruption of social services and economic sectors without affecting governance systems. Examples of such crises include the global financial crisis (2007–2008), the SARS outbreak (2002–2003), the MERS outbreak (2012), the H1N1 outbreak (2009), the Indian Ocean tsunami (2003–2004), the West Africa Ebola Virus Disease (EVD) outbreak (2013¹), food and fuel price increases in 2007–2008, severe recessions in certain regions (e.g., the 1997–1998 Asian financial crisis, the Latin American 'coffee crisis') and certain countries (e.g., the 1994–1996 'tequila crises' in Mexico), and major earthquakes. Also included in our review are severe droughts or other extreme weather events with nationwide effects. We also examine aspects of the HIV/AIDS pandemic; although it was not as rapid in onset, its impact on adult mortality affected children's wellbeing and has had long-running detrimental effects on economies and the welfare of affected households. Until now COVID-19 case fatalities have mostly been observed among the elderly in advanced economies while it is unclear if the same phenomenon will be replicated in low income settings, particularly in countries with pre-existing vulnerabilities like the HIV/AIDS pandemic. Lessons can be drawn from policy responses utilized to address the HIV/AIDS pandemic's impacts on adult mortality and child well-being, especially if prime age adult mortality from COVID-19 increases in developing countries.

1 The global HIV pandemic was not included in this review as it is different and slower in its spread/contagion and was not as rapid in onset.

Methodology

Our search strategy had the following inclusion criteria. Firstly, we focused on these macroeconomic and social protection measures: fiscal/economic stimulus, business support policies² and debt and tax relief; social insurance/contributory programmes³; social assistance⁴; labour market programmes and policies⁵; and social services. As the literature on social services during crises is vast, the review narrowly focused on social care functions, as defined by UNICEF, and spending on social services⁶ in order to maintain coherence in the typology of social protection responses and brevity in the report. Therefore, the review did not include evidence on the supply/implementation of health services and systems (including disease containment measures, immunization, antenatal/postnatal care), water and sanitation, and education services.

Secondly, evidence was collated from quantitative and qualitative literature, including systematic reviews, experimental and quasi-experimental impact evaluation studies, descriptive studies, policy reviews and policy papers. Thirdly, the search targeted, but was not limited to, peer reviewed published articles. In addition, we also reviewed grey literature, working papers, monographs, edited books and book chapters and PhD theses (excluding conceptual, theoretical publications and master's degree level theses). Fourthly, studies were included if they were published in the period 2000–2020.

Finally, the review focused on four outcome domains:

1. **Economic security:** Indicators include poverty, household income, livelihood opportunities, remittances, household consumption, indebtedness, savings, access to credit, food security and dietary diversity, adult employment, child labour, asset wealth, and inequality.
2. **Health and health care services:** Indicators include healthcare utilization, sexual and reproductive health, child health and nutrition, mental health, mortality rates, and risky health/social behaviours (sexual behaviours, sex work, crime, alcohol, tobacco, drug abuse).
3. **Children's education:** Indicators include literacy rates, school attendance rates, enrolment, drop-out rates, academic skills, and cognitive abilities.
4. **Gender equality, family formation and gender-based violence:** Indicators include child marriage, intimate partner violence, women's autonomy in decision-making, women and caregiving, and care work/unpaid work.

2 Business grants, interest-free loans, tax relief, rent/mortgage/utilities relief.

3 Pensions, unemployment benefits/insurance, health insurance, paid sick leave, social security contribution/waiver etc.

4 Non-contributory cash or in-kind transfers, education grants/waivers, health fee waivers, school meals, public works.

5 Employment guarantees, minimum wage laws/increased wage subsidies, training, short-time work benefits.

6 Our scope is narrow; we focus on spending on social services such as health and education and social care services like direct outreach, case management and referral services to children and families. UNICEF considers social care services to be vital in enabling child-sensitive social protection through the identification of family needs and connection to relevant services.

The search terms are available in Annex I. Systematic searches were conducted in a range of databases including EBSCO Host (EconLit, Medline, Business Source), Elsevier (Scopus), Science Direct and STOR. Other online platforms including Google Scholar, EconPapers, Social Science Research Network (SSRN), 3ieimpact.org, NBER Working Papers, websites for the World Bank, IFPRI, ILO and UNU-WIDER, and the Google search engine were also used.

After executing search terms, the first 200 results of each search were screened by title/abstract and full text, according to the inclusion criteria. The authors used a data extraction file to record information about authors, country of study, type of crisis, type of policy response, authorities responsible for enacting and implementing responses, study design and method, participants (including sample size and demographic information) and results and/or impacts of the policy response.

After applying inclusion criteria, the rapid review identified 132 studies from published and unpublished literature. These comprised 55 studies (including 21 literature reviews) that describe the type of economic policy and social protection responses to crises and 77 studies (including 22 literature reviews) that report the effects on children of these policy responses. Since this was a rapid review, there were limitations in the short time available. A quality assessment for quantitative studies was not carried out and the rapid nature of the approach prevented a comprehensive and exhaustive review.

The remainder of this paper is organized into three sections. Section Two examines the types of macro-economic policy and social protection responses to previous crises and how they were implemented, drawing lessons of relevance to the COVID-19 outbreak. Section Three presents evidence of the direct and indirect impacts of macro-economic and social protection policy responses on children by examining outcomes of interest. Section Four concludes the paper by summarizing the evidence gaps and key messages for policymaking.

2. WHAT WERE THE ECONOMIC POLICY AND SOCIAL PROTECTION RESPONSES TO PREVIOUS CRISES?

This section examines the nature and form of economic policy and social protection responses to previous health and economic crises and natural disasters.

Health and economic crises have primary and secondary effects on children and these, together with the channels through which they are realized, strongly depend on the type of crisis. For instance, epidemics affect the health of households and children both directly, through the spread of disease, and indirectly, through the economic and social impacts of the containment measures/restrictions (quarantine, social distancing, travel restrictions) taken to mitigate the crisis (Madhav et al., 2017). Child and maternal health and mortality are also directly and indirectly affected by the way disease outbreaks overwhelm health systems and divert resources from regular healthcare services, such as inpatient services, ante- and postnatal care, routine immunization, and disease prevention, and by how containment measures decrease access to healthcare facilities (Tricco et al., 2012; Brolin Ribacke et al., 2016; Elston et al., 2017; Wilhelm and Hellinger, 2019; Delamou et al., 2017; Quaglio et al., 2019). Financial crises have macro-economic effects which indirectly affect children's health and education due to intermediate impacts such as the reduction in provision of public services or a declining social capital (Harper et al., 2011). Evidence from past economic crises shows that unfavourable macro-economic conditions translate to reductions in household income at the micro-economic level (Jones and Marsden, 2010; Harper et al., 2011). These impacts are relatively more frequent in developing countries, particularly in households at the lower percentile of the income distribution (Zimmerman and Carter, 2003), which raises the risk of households falling into poverty⁷ or exacerbates poverty levels, as is expected with the COVID-19 pandemic (see Box 1). A non-exhaustive but indicative summary on the effects of crises on children is available in Annex II.

Box 1: Projections of COVID-19's impacts on poverty

- The health and economic consequences of COVID-19 will decrease household income and consumption and ultimately raise poverty rates. Several studies have estimated that the COVID-19 pandemic **will increase poverty and hinder the fulfilment of the UN Sustainable Development Goal of ending poverty by 2030** (Sumner et al., 2020).
- Based on computable general equilibrium models, emerging studies find that the COVID-19 pandemic will **significantly increase the numbers of poor, particularly in developing regions like sub-Saharan Africa and also in MIC**, with estimates ranging from **nine to 35 million newly-poor people** (ILO 2020, McKibbin and Fernando, 2020; Vos et al., 2020).
- Other estimates suggest that global contraction of the economy in the range of 5–20% could result in poverty rates rising for the first time since 1990, **with Asia, Africa and Latin America and Caribbean regions bearing the brunt of this impact; a high global contraction (20%) would increase poverty levels by between 420–580 million** (Sumner et al., 2020).

Sources: ILO 2020, McKibbin and Fernando 2020; Sumner et al., 2020, Vos et al., 2020

⁷ Throughout the document, this refers to 'monetary poverty' as multi-dimensional poverty usually responds slowly to drastic changes in income during crises.

Public policies implemented in response to health and economic crises and natural disasters, in most cases, comprise a set of different instruments. The needed and available mix of policies largely depends on the characteristics of the economy, including the country's fiscal space and labour market features, as well as on the type and intensity of the shock. Based on the reviewed literature, we document the nature of economic policy and social protection responses and policy reforms, and the changes in the types of responses during crises.

2.1 Pandemics and health emergencies

Previous studies have found that epidemics/pandemics heighten pre-existing vulnerabilities and inequalities as they have disproportionate effects on the most vulnerable segments of society e.g., children, women, the elderly, people with disabilities, and people living with chronic diseases and conditions (de Bouchout and de Neubourg, 2015). Contagious disease outbreaks also overburden health systems, particularly resource use and availability of space and personnel (Brolin Ribacke et al., 2016; Wilhelm and Helleringer, 2019). Overburdening the system can reduce service time for existing patients requiring care and increases morbidity and mortality related to standard health caseloads. The challenge therefore is to ensure implementation of measures aimed at controlling the spread of disease as well as providing continuity of regular health services, especially for vulnerable groups (pregnant women, individuals with pre-existing medical conditions, young children) and continue the prevention of other diseases (Delamou et al., 2017; Parpia et al., 2016; Quaglio et al., 2019). In addition to health measures for containment and control, evidence from the review shows that public policy responses to previous rapid onset disease outbreaks and pandemics are occasionally accompanied by social protection measures.

Although little is documented about social protection responses to previous outbreaks of viral diseases such as SARS (2003), MERS (2012) and H1N1 (2009), one major shortcoming was that children's needs were not directly taken into account in the design and planning stages (O'Sullivan and Bourgoin, 2010), a key lesson for current social protection responses to COVID-19. In low- and middle-income countries, responses to rapid-onset disease outbreaks have mainly included health systems strengthening and training health workers, increasing immunization coverage, and taking preventive measures to reduce the risks of deadly diseases such as malaria (Kelly, 2020). However, during and after the 2011 West African EVD outbreak, social protection coverage was limited and largely dependent on short-term, non-statutory, social assistance programmes implemented by governments in partnership with donors, NGOs and other stakeholders. While cash transfers were introduced during the crisis, other interventions were mostly implemented for post-Ebola economic recovery (Guluma, 2018; IDRC, 2017). In Sierra Leone, international organisations, in partnership with the government and donors, implemented short-term social protection measures for EVD survivors such as cash transfers, in-kind transfers, educational support and jobs (Richardson et al., 2017). Cash transfer programmes paired with support for farming activities (i.e., agricultural inputs and technical and business skills training) were also provided by different organisations such as CARE, UNICEF, and USAID (Guluma, 2018; IDRC, 2017) to poor and vulnerable households in Sierra Leone and Liberia. One notable intervention in Sierra Leone was a programme called the Youth Employment Support Project (YESP) which began before the EVD outbreak but continued during the crisis, providing young people with stipends together with training in literacy and numeracy, financial skills, the specific trade of a participant's choice (e.g., auto mechanics, electricity, tailoring and design), and entrepreneurship and business development (Rosas et al., 2017).

Lessons can also be drawn from policy responses to the HIV/AIDS pandemic, which has not only infected children but also affected them through adult or parental deaths or illness. Gillespie and Whiteside (2020)⁸ posit that social protection responses to the current COVID-19 pandemic could learn from the way social protection systems became HIV/AIDS-sensitive and should seek to strengthen social protection systems in order to protect vulnerable groups and to slow transmission. HIV-sensitive social protection responses have not only targeted infected individuals but also people at risk of infection or vulnerable to the detrimental impacts of HIV/AIDS such as children affected or orphaned by HIV/AIDS and labour-constrained households (Temin, 2010). HIV-sensitive social protection programming typically comprises social assistance through regular and predictable transfers of cash and food for those affected by HIV and the most vulnerable. Due to the multi-dimensional consequences of HIV/AIDS (on health, economics and socially), social assistance schemes are usually combined with enhanced access to treatment, health and care services, policies and legislation that safeguard the rights of the most vulnerable populations (Ibid; de Bouchout and de Neubourg, 2015). When social assistance is combined with social work and child protective services, exclusion errors are reduced (Ibid). Social transfers are also often targeted to the caregivers of orphaned children, in this case the elderly, since HIV/AIDS is a leading cause of prime age adult mortality in stricken regions (Miller and Samson, 2012; KULA, 2010).

2.2 Economic crises

Public policy responses to the 2007–2008 global financial crisis provide useful examples of how a global shock was addressed by countries in different ways and provide lessons for the current COVID-19 pandemic. Several global policy reviews and surveys of responses to financial crisis find there was an initial short-lived phase during which countries implemented expansionary fiscal and social protection policy responses but this was ultimately followed by a longer phase during which financial austerity measures were adopted.

The initial response to the 2007–2008 global financial crisis consisted of fiscal stimulus

Although the nature of the shock and its effects were different across countries, the initial reactions of governments to the global economic crisis were similar (Fiszbein et al., 2011). In the period from 2008 to 2010, many developing countries⁹, particularly middle income countries, adopted a counter-cyclical policy response aimed at protecting employment and incomes, maintaining basic services and promoting economic activity (Fiszbein et al., 2011; Lewis and Verhoeven, 2010). The scale of fiscal stimulus responses and policy choices varied across regions and countries, depending on their fiscal position, level of informality of the economy, job market characteristics, maturity of the social protection system and broader policy priorities.

In the United States, the government bailed out several industries and engaged in stimulus spending, which provided tax rebates to individuals to generate consumer spending and business tax breaks to spur investment (approximately 1 per cent of GDP), and temporarily increased the generosity of social programs (Blinder, 2013). This was followed by the American Recovery and Reinvestment Act (ARRA, known as ‘the stimulus’) of 2009 which provided tax cuts, social spending, revenue sharing with state and local governments, and public expenditures — approximately 5 per cent of GDP and, “the largest

8 IFPRI, ‘Lessons from the AIDS epidemic on how COVID-19 may impact food and nutrition security’ <ifpri.org/blog/lessons-aids-epidemic-how-covid-19-may-impact-food-and-nutrition-security>

9 Examples of countries included Sri Lanka, Chile, Mexico, Brazil, India, the Philippines, and Kazakhstan among others.

discretionary stimulus bill among developed economies” (McCarty, 2012). Most countries in the European Union also introduced fiscal stimulus packages to bail out the finance industry and expand the welfare state in the early stages of the crisis, which led to an increase in public spending, especially in social protection¹⁰ (Martorano, 2014; Richardson, 2010; van Kersbergen, Vis and Hemerijck, 2014). However, the fiscal stimulus in Europe was of a smaller scale to that of the United States (Cameron, 2012). In countries like Sweden, recovery plans were biased towards sectors dominated by men as the plan focused mainly on subsidies for ‘heavy’ industries. Only a small portion of public funding was directed to more gender-neutral areas of the labour market or to the local government sector with 80 per cent female employees (Finnegan et al., 2016). Studies also show that where child-specific and age-sensitive fiscal policies and social protection interventions were introduced, they were critical in minimizing the longer-term effects of the crisis and in building human capital (Barrientos and Nino-Zarazua, 2011; Fiszbein et al., 2011).

In South-East Asia, specifically in Indonesia, Malaysia, Thailand and Vietnam, fiscal stimulus packages were generally small in value and the implementation of fiscal stimulus policy was often delayed as a result of political interference and inefficient bureaucratic procedures (Green, 2010). Stimulus packages in both high- and middle-income countries generally included measures with important implications for families with children. Most widely promoted measures included social transfers and child benefits, parental leave policies, school feeding and education subsidies among others (Richardson, 2010; Martorano, 2014). By contrast, in many low income countries, governments initially promoted expansionary fiscal policies and increased total expenditures in the period 2008–09, but responses were mostly aimed at providing an economic stimulus and boosting employment and labour markets via infrastructure spending rather than social protection (Ortiz and Cummins, 2013; McCord, 2010). This approach was utilized by about 80 per cent of African countries surveyed in 2009 (te Velde and Massa, 2009). Moreover, low-income countries faced more severe fiscal pressures and were less able to maintain their pro-cyclical expenditures in social services or increase their investments in social protection to meet growing demands (Ortiz and Cummins, 2013; Ortiz et al., 2011).

Social protection measures were key components of the fiscal stimulus

The financial crisis reduced social security contributions in 25 countries from various regions including Cambodia, China, Colombia, Germany and the USA (Bonnet et al., 2012). Yet in the period from 2008 to mid-2010, many countries used their fiscal stimulus to expand their social protection programmes¹¹. Most countries took advantage of windows of opportunity presented by the crisis to reform their existing social protection systems, their statutory social protection programmes, and to extend both the reach and scope of the social assistance schemes to vulnerable households with children (Fiszbein et al., 2011; Bonnet et al., 2012). Fewer countries introduced new social protection policies while some others accelerated the implementation of programmes planned before the crisis (Bonnet et al., 2012). European governments focused mainly on reforming school and childcare benefits and parental leave policies, introduced tax breaks to help large families, expanded the eligibility and coverage of unemployment benefits, and strengthened their active labour market programmes (Richardson, 2010; Bonnet et al., 2012; Martorano, 2014). In the USA, funding for unemployment insurance quadrupled between 2007 and 2010, making it the most important legislative response to the global financial crisis (Bitler and Hoynes, 2016; Moffitt, 2013), yet there were inequalities in access. Unemployment benefits

10 For example, public spending increased by more than 10 points in Ireland and Estonia while it rose by less than one point in Hungary and Malta (Martorano, 2014).

11 Lewis and Verhoeven (2010) estimate that during the 2007–08 crisis World Bank lending expanded by 50 per cent as governments expanded their safety nets.

under the American Recovery and Reinvestment Act of 2009, Medicaid, and the Supplemental Nutrition Assistance Program usually excluded young single men who are typically at greatest risk of substance abuse and suicide, but they did benefit poor women and children (Modrek et al., 2013).

Middle income countries with recent experiences of financial crisis (South Asia in the 1990s and Latin America in the early 2000s) had already established social protection policies. They were therefore more able to rapidly respond to the crisis by modifying their policies and initially, expanding cash transfers and public employment schemes (Bonnet et al., 2012). Across regions, examples of social protection responses in middle income countries included horizontal and/or vertical expansion of cash transfers. Horizontal (coverage) expansions were implemented for Brazil's Bolsa Familia, Mexico's Progresa, South Africa's Child Support Grant and Chile Solidario. Other countries increased benefit levels (vertical expansion) e.g., Chile Solidario, Kyrgyzstan's Child Benefit and Mexico's Progresa. Chile specifically undertook reforms of the Chile Solidario programme to expand coverage of the integrated set of benefits and included 1.4 million households with children. In other countries, pilot programmes were scaled up; for example, Pakistan's now-flagship social protection programme Benazir Income Support Programme (BISP) and the Philippines' '4Ps' (Barrientos and Nino-Zarazua, 2011; Gassman, 2011; Marcus and Gavrilovic, 2010). In the Philippines, shocks accelerated the government's social protection reform agenda and as part of its stimulus package, the government rapidly scaled-up its '4Ps' pilot, and increased its coverage from 376,000 households in 2008 to 1 million household beneficiaries in 2009 (Fiszbein et al., 2011). Social assistance accounted for about 10 per cent of the Philippines' stimulus package (Green, 2010). Although a less common approach, a few countries introduced new cash transfer programmes, such as El Salvador's Comunidades Solidarias Rurales and one-off cash transfers in Indonesia.

Still, many low-income countries, especially in sub-Saharan Africa, and South and Central Asia were unable to quickly adjust coverage and/or benefits in response to rapidly rising vulnerability (Ortiz et al., 2011). Social protection responses, particularly social assistance, were hampered by weak social protection systems and low coverage of pre-existing schemes. Furthermore, expansion of coverage to the poor and vulnerable during the crisis was constrained by decreased revenues. However, some social protection instruments were utilized and supported by donors; mainly food or fuel subsidies, food cards and school feeding schemes to maintain consumption, and public works to support temporary employment. Yet donors prioritized investments that protected economic growth e.g., infrastructure and the private sector (Bonnet et al., 2012; McCord, 2010). Ortiz et al., (2011) estimated that 38 countries¹² scaled-up their school feeding programmes as a response to global food price shocks (in 2008 and 2010 respectively), although most of these interventions already had wide coverage before the shocks. Some African countries successfully expanded their social protection coverage during this period e.g., the scale-up of Kenya's OVC cash transfer programme, introduction of one-off cash transfers in Senegal, and increasing the age limit from 15 to 17 for the child support grant in South Africa (Barrientos and Niño-Zarazúa, 2011; Gassmann, 2011; Marcus and Gavrilovic, 2010).

Some social protection responses and reforms launched during the financial crisis have remained in place. Pension reforms were undertaken in various countries to increase coverage and improve effectiveness and efficiency. In countries such as Argentina, Chile, Colombia, Malaysia, Nigeria, Barbados, Cape Verde, Costa Rica, Lesotho, Russia, Bulgaria, Germany and Italy, examples of reforms included increasing benefits, decreasing contribution levels, and significant structural reforms such as

¹² Brazil, China, Honduras, Mexico and South Africa were among the countries that scaled-up school-feeding programmes reaching a very wide swathe of children.

the unification of pension systems (Bonnet et al., 2012). Some countries extended coverage of social protection schemes to informal workers. Argentina introduced a new non-contributory scheme (child allowance) that covered youth and informal workers, and Germany and Japan extended coverage of unemployment benefits to informal workers while Malaysia did the same with a pension scheme. However, in many other countries where pre-existing schemes were less progressive or excluded informal workers, expansions likely perpetuated exclusion and entrenched extreme poverty. In the Latin American and Caribbean regions, statutory CCTs targeting the poor and extreme poor — common in countries such as Jamaica and Mexico — incorporated countercyclical buffers into their CCT programmes to protect purchasing power during the global financial crisis (Fernandez et al., 2011). Similarly, in Chile and Ecuador statutory CCTs introduced the provision of supplemental/top-up benefits in the event of a crisis (Ibid.).

However, statutory CCTs are not necessarily the appropriate risk management tool for vulnerable non-poor or near-poor families affected by disasters who are at risk of falling into poverty (Fernandez et al., 2011). Informal workers are an example of a near-poor or at-risk population. Some recommend temporary public works programmes as these can be effective for the vulnerable non-poor if design and implementation are done well and transparently, with clear exit rules (Fernandez et al., 2011). Public works programmes are generally self-targeting and not based on fixed criteria, a desirable feature during crises; wages are set at levels lower than the reservation wage of people who would not be in need (Dammert et al., 2018; Gehrke and Hartwig, 2018). Moreover, public works can readily be offered to the newly poor who might be excluded from pre-existing social assistance programmes where eligibility is based on pre-crisis assessment of household income and assets (Sumarto and Suryahadi, 2003). Public works should also consider the need for childcare services and flexible timing allowing women's participation (Gehrke and Hartwig, 2018).

The fiscal stimulus later reversed into austerity with severe ramifications for children

In the period between 2010 and 2012, the worsening of economic conditions and global recession pushed countries into a process of fiscal consolidation and austerity (Ortiz and Cummins, 2013; Bonnet et al., 2012; Ortiz et al., 2011). A review of public expenditures and adjustment measures in 128 countries by Ortiz and Cummins (2013) found that between 2010 and 2012, governments globally consolidated budgets to reduce public spending and increase tax revenues to improve their fiscal positions. Austerity policies were adopted in 91 countries, and about 25 per cent of the developing countries reduced expenditures to below pre-crisis levels (Ortiz and Cummins, 2013). Similarly, a UNICEF review of 126 developing countries found that most countries either removed or phased out crisis response policies in 2010–11 as part of austerity measures (Ortiz et al., 2011).

Social protection budgets were among the most vulnerable expenditure items (Martorano, 2014; Ortiz and Cummins, 2013). For example, 55 developing and 25 high income countries rationalized and reduced coverage of safety net programs (Ibid.). For instance, austerity measures included cuts to tax credits and changing child benefits from universal to means-tested transfers in the United Kingdom and in Finland, cuts to benefits for non-professional carers of dependent relatives and for the severely disabled, and a pause in child benefit indexation (Finnegan et al., 2016). Generally, these austerity measures led to increases in gender inequality as they often targeted benefits received by women and single mothers and represented a larger share of women's incomes than men (Ibid.). In the US, spending cuts were introduced in 2011, targeting social assistance and social services and prolonging the global financial crisis (Maks-Solomon and Stoker, 2019). At the state level, public spending

was combined with increased taxes and accompanied by reductions in state and local government employment levels (Campbell and Sances, 2013; Gordon, 2012; Rigby and Hatch, 2017).

In developing countries, fiscal contraction was achieved through the phased elimination of subsidies, wage bill cuts/caps, and reforms of selection criteria into social assistance schemes and old age pension reforms that potentially reduced coverage among vulnerable groups. These reductions and reforms likely had negative impacts, predominantly among women and children (Ortiz and Cummins, 2013). In Europe, the most common policy intervention was the reduction of family or child benefits and/or tightened eligibility conditions, and tightened eligibility for unemployment benefits (Martorano, 2014; Bonnet et al., 2012). Other measures entailed rationalizing investments in education and raising tuition fees (e.g., Finland, Lithuania, Moldova, Portugal, Russia, Spain and the United States) (Martorano, 2014). According to Martorano (2014), these dramatic changes in policy reactions exacerbated the effects of the crisis, especially in low income countries, and worsened conditions for the poorest children¹³. In Spain, analysis of the National Transfer Accounts before and after the global financial crisis showed the welfare state favoured the elderly and was accompanied by a cut in family income and a consequent dramatic deterioration in child welfare (Soléa et al., 2020). The absence of specific public policies for protecting child well-being, leaving the protection of children essentially in the hands of the family, has proven to be ineffective. The authors argue that the bias of public resources in favour of the elderly cannot be justified and that this type of policy design demonstrates that children's rights are not institutionalized (Soléa et al., 2020).

Experiences from responses to the global financial crisis clearly demonstrate that pre-existing social protection infrastructures were crucial for a rapid response and that initial expansion of social protection and public expenditure was followed by serious contractionary/austerity measures which jeopardized the well-being of children and other vulnerable groups (e.g., women, single mothers).

2.3 Natural Disasters

Previous natural disasters of a rapid onset nature such as earthquakes and tsunamis have devastated populations and economies, substantially increased social protection needs, and overwhelmed health and social protection systems. They can also offer lessons for the COVID-19 pandemic.

Policy responses to the 2004 Indian Ocean tsunami included emergency cash transfers, shelter assistance and rebuilding in Indonesia, Sri Lanka, Aceh and the Maldives (Adams, 2007; Heltberg 2007; Akerkar, 2007; Yonder et al., 2005). However, the implementation of cash transfers in Indonesia, Sri Lanka and Aceh faced challenges such as excessive inter-agency competition resulting in duplication and gaps in coverage; the absence of management information systems leading to weak compliance monitoring; weak collaboration between key implementing agencies over cash transfers; and a lack of genuine participation by communities in the design and implementation of interventions (Adams, 2007). Other responses were gender-sensitive and included micro-credit programs for women, engagement of women as active agents in relief and recovery efforts, and providing additional awareness campaigns to improve women's knowledge of their rights (Akerkar, 2007; Yonder et al., 2005).

13 Data for European region shows that while overall poverty rose on average by 1.9 points between 2008 and 2012, child poverty increased on average by 2.7 points (Martorano, 2014). Child poverty increased in 18 of 30 countries.

There are examples of how short-term social protection measures have been aligned with the permanent system in response to natural disasters. In China, emergency and short-term social protection responses to earthquakes have been sequenced with transitions of beneficiaries into permanent statutory programmes. Government responses to the 2008 Wenchuan earthquake in China were in the form of relief (shelters, rescue, care) and short-term emergency social protection through cash and food transfers for vulnerable groups such as the disabled, orphans, the homeless, surviving family members, displaced families and families living in damaged houses (Salazar et al., 2011). After six months, the targeted groups eventually transitioned into existing statutory social protection systems such as the minimum living standard system (UCTs for the poor), the 'Five Guarantee System' (government social insurance for the elderly), and the 'Temporary Assistance for Winter' programme (cash/in-kind benefits, educational fee waivers, housing subsidies, non-contributory health insurance, social support services for the poor). However, the earthquake overburdened local government relief/social protection programme personnel who were also victims of the damage and later led to a high incidence of burn-out and a decline in self-rated health (Salazar et al., 2011; Hu et al., 2010).

In Fiji, the government has utilized existing statutory social protection programmes to respond to disasters. After a category five tropical cyclone in 2016, the Fijian government provided top-up cash transfers to all registered beneficiaries of three statutory social assistance programmes, offering combinations of cash transfers and food vouchers, regardless of whether people resided in affected or unaffected areas (Mansur et al., 2018). The top-up benefits were equivalent to three months' worth of regular cash transfers. These three programmes serve poor households, the elderly (older than 68) and vulnerable families with special needs (single mothers). Other social protection responses included emergency food rations, allowing beneficiaries to withdraw pension savings from the public pension fund, and housing vouchers. However, government assistance excluded near-poor households affected by the same disaster (Ibid.).

Heltberg (2007) reviewed the types of response to major disasters, typically rapid-onset events like earthquakes, tsunamis, windstorms and floods, and makes the case for cash transfers as the best form of post-disaster social protection support in South Asia but cautions that CCTs are more suited for a long-term response as they require compliance monitoring systems. When targeting of cash transfers or other social protection schemes is required in response to large disasters, poverty targeting is deemed to be more effective than targeting based on deaths/injuries or assets (Heltberg, 2007). This is especially the case when there are financial constraints and the aim is to prevent at-risk populations from falling into poverty. However, poverty targeting can be expensive in terms of costs, time and human resources; it can also cause social tensions (Ibid.).

Index-based weather insurance is increasingly being adopted as a policy response to extreme weather events. For example, it is applied in Mongolia to provide insurance to herding households against massive livestock losses caused by extreme winters. The Mongolian Index-Based Livestock Insurance (IBLI) was piloted in 2006 and gradually extended to reach national coverage in 2012 (Bertram-Huemmer and Kraehnert, 2017). Although droughts are different from earthquakes and natural disasters in that they are recurrent and can be foreseen, they tend to have community and nationwide economic effects and as such, can also help inform responses to COVID-19, especially in areas affected by climate variability. Systematic reviews show that social assistance in the form of cash and food transfers is a key form of relief and recovery response to drought (Pega et al., 2015; Doocy and Tapis, 2017).

2.4 Summary of key findings

Based on the reviewed evidence, the most common responses were economic stimulus packages (e.g., industry bailout, tax breaks for businesses or individuals, public investment) and social protection (including social assistance, social insurance and labour market policies). While evidence on economic policy and social protection responses to virus pandemics/outbreaks (apart from HIV/AIDS) is scant, documentation of policy responses to economic crises is extensive, particularly for the global financial crisis. For each of these policy responses, Table 1 summarizes the key findings for this section, including when and where responses were implemented, the duration of responses, examples and preliminary lessons.

Table 1. Main economic policy and social protection responses to previous crises

Response	Policy instruments	Crises and timing	Regional examples
Economic stimulus	Industry bailout, tax breaks for businesses or individuals, increases in public spending, including social protection.	<ul style="list-style-type: none"> ■ <i>Stimulus</i> mostly applied as <i>initial short-term</i> response to the global financial crisis (2007–2013) to protect employment, maintain basic services and spur economic activity; ■ Stimulus packages have rarely been considered for diseases outbreaks or natural disasters (possibly because the scale of economic impacts was not as large as COVID-19). 	<ul style="list-style-type: none"> ■ Most comprehensive stimulus packages in HICs e.g., 2009 American Recovery and Reinvestment Act (tax cuts, social spending, revenue-sharing with state and local governments, higher public expenditure); ■ Smaller packages delivered in LMIC (e.g., Indonesia, Malaysia, Thailand, Vietnam), often with delays; ■ While in low-income countries, stimulus is focused mainly on employment and infrastructure, in HICs a large chunk of public spending was on social protection.
Austerity measures	Reduction of public spending, tax reforms to increase revenues.	<ul style="list-style-type: none"> ■ From 2010–2012, <i>global recession</i> pushed countries into fiscal consolidation and austerity to improve their fiscal position; ■ Austerity measures involved removing or phasing out expansionary crisis response policies in some cases <i>permanently</i> (e.g., elimination of subsidies, wage bill cuts, reducing safety net coverage, raising tuition fees, etc.). 	<ul style="list-style-type: none"> ■ Austerity followed globally (91 out of 128 countries in 2010–2012), e.g., United States (cuts in social assistance and social services with negative impacts on women and children), and Spain (cuts in family income and dramatic deterioration in child welfare).

Response	Policy instruments	Crises and timing	Regional examples
Social protection	Social assistance (e.g., cash or food transfers), social insurance (e.g., unemployment benefits, weather insurance); labour market policies (e.g., training or services to improve matching of labour supply and demand).	<ul style="list-style-type: none"> ■ Social assistance, such as <i>cash and in-kind transfers</i> is the most popular type of response in crisis contexts with variations in design, scale and duration; ■ Responses varied from permanent expansion of existing cash transfer programmes, but also <i>new one-off measures, temporary public works, food subsidies/cards, school feeding programmes</i> in economic crisis settings; limited use of cash in response to disease outbreaks, mostly <i>short-term non-statutory programmes</i>; some <i>emergency transfers</i>, cash and food used for natural disasters; and expanding existing systems; ■ <i>Unemployment benefits</i> were expanded, mostly in response to economic crises; index <i>weather insurance</i> was piloted and gradually expanded into permanent programmes in response to natural disasters; ■ Labour market programmes were adopted, mostly in response to economic crises and disease outbreaks, with <i>permanent or transitory measures</i>, based on context. 	<ul style="list-style-type: none"> ■ High- and middle-income countries (e.g., Brazil, Mexico, Chile, South Africa) <i>expanded cash transfer (coverage and size)</i> in response to the global financial crisis; low income countries mostly introduced <i>new one-off transfers</i> (e.g., Senegal), <i>temporary public works and scaled up pre-existing school feeding programmes</i>; China transitioned from emergency into <i>permanent statutory cash transfers</i> (Wenchuan earthquake); Indonesia, Sri Lanka and Maldives used <i>emergency cash responses</i> to the tsunami, but impact was hampered by exclusion errors and limited coordination; ■ <i>Unemployment benefits</i> increased in high-income countries, through <i>expansion</i> of existing schemes, in response to the global financial crisis (e.g., Germany, Japan, United States); examples of index <i>weather insurance</i> include Mongolia (Index Based Livestock Weather Insurance, IBLI); ■ <i>Labour market programmes</i> were adopted in various contexts: in high-income countries, mostly through strengthening existing programmes; in lower income countries, mostly through temporary measures (e.g., Sierra Leone Youth Employment Support Project, YESP).

Source: Authors' assessment of the evidence

3. ECONOMIC POLICY AND SOCIAL PROTECTION RESPONSES TO CRISES: PRIMARY AND SECONDARY EFFECTS ON CHILDREN

This section discusses evidence of the impact of economic policy and social protection responses to previous disasters and to health and economic crises. Evidence of impact is assessed at the child level (primary effects), household level or other individual level, or at national/aggregate level (secondary effects). We classify the reported responses into five categories as described by the inclusion criteria: economic stimulus; social assistance; social insurance; labour market programmes; and social services.

3.1 Economic stimulus and Austerity

As discussed in Section 2.2, many countries implemented fiscal stimulus packages in response to the global financial crisis. Available evidence shows that stimulus packages can mitigate the effect of the crisis on household poverty and family income while austerity measures, mostly undertaken in subsequent phases to reduce the budget deficits from expansionary policies, have negative impacts on health systems, population health, child well-being, having a home, mental health and parental caregiving.

Economic stimulus responses to the global financial crisis in Europe had a protective impact on poverty, although effects by gender differ by country. In Sweden, women experienced higher increases in income poverty than men (twice as much), while in the United Kingdom, Spain and Poland, income poverty among women declined (Finnegan et al., 2016). China's massive fiscal stimulus, mainly realized through a substantial increase in public investment, was associated with a relatively fast GDP recovery to pre-crisis levels in early 2010 (Wen and Wu, 2019). However, while counter-cyclical public investments can boost aggregate demand and contribute to the revival of the private sector, there is the risk that public spending may exacerbate some structural inefficiencies and crowd out productive private investments in the long term (Liang, 2010; Huang et al., 2019). In Uruguay, analysis of the distributional impacts of the three main policy responses to the financial crisis shows that only increased public investment improves welfare and income for all households except the richest, with the benefit higher for poorer households. The other two policies (increased public consumption and expansion of social benefits to unemployed workers) reinforce the regressive impact of the crisis on households' income (Estrades and Llambi, 2013). Because these three policies are costly and have implications at the macro-economic level while having only a limited or negative effect on poverty and household income, the authors suggest the future use of alternative policies, such as direct cash transfers (Ibid.).

As mentioned in Section 2.2, initial macro-economic and social protection policy responses to the global financial crisis were largely expansionary but were followed by financial austerity with the aim to control deficits and consolidate debt. In several European countries, financial austerity has been linked to adverse impacts on population health, child well-being and healthcare use, particularly for vulnerable groups, including individuals who lost their jobs during the crisis, to a larger extent than the crisis itself (Stuckler et al., 2017; Karanikolos et al., 2013). In Greece, Spain and Portugal, the financial crisis decreased tax revenues and governments increased spending on bank bailouts which raised government deficits (Karanikolos et al., 2013). Austerity policies were imposed by international financial institutions (IMF, European Central Bank and European Commission) as a condition for financial bailouts for these countries (Ibid.). Austerity policies included cuts to social protection spending (pensions, social transfers), cuts to the minimum wage and to the public and health sector

workforce, and cuts to spending on drugs and public health services. Unlike Iceland, which avoided austerity policies, there was a notable increase in suicide together with outbreaks of infectious diseases and reports of homelessness, crime, and parents giving their children up to care services (Ibid.). In Portugal and Greece, austerity measures had a detrimental effect on health systems and utilization of healthcare services (Legido-Quigley et al., 2016; Ifanti et al., 2013).

While most of the evidence on impact of fiscal stimulus responses is from developed countries, there is evidence that financial crises have detrimental effects on poverty, but also that higher levels of social spending are associated with less severe negative effects of the crises on poverty (Kiendrebeogo et al., 2017).

3.2 Social protection: Social assistance

Permanent and emergency social assistance schemes have been used in high-, middle- and low-income countries to address various health and economic crises. They include the provision of cash transfers (popular instrument), cash plus programmes, food transfers, school subsidies/fee waivers and school meals.

Cash and food transfers

Evidence on the impact of social assistance schemes on primary and secondary outcomes relevant to child well-being in health emergencies/pandemics (SARS 2003, MERS 2011, H1N1 2009) is generally scant. There are a few studies on the 2011 EVD outbreak. In Sierra Leone, short-term social protection measures — specifically, different types of social transfers including cash transfers, in-kind transfers, educational support, and/or jobs — had long-lasting effects on the emotional well-being and food security of EVD adult survivors two years after support ended, with the intensity and longer duration of receipt of instruments having the larger effect, particularly on jobs and cash transfers (Richardson et al., 2017).

Another body of literature we can learn from is that of the HIV/AIDS pandemic. While evidence of the impacts of HIV-sensitive social protection programmes is not extensive, several reviews of studies conducted in various countries¹⁴ in sub-Saharan Africa and other regions, conclude that cash and in-kind transfers, including food aid, alleviate the negative consequences of HIV-related illnesses or deaths in affected households (McCord and Himmelstine, 2013; UNAIDS, 2010; Stene et al., 2009; Temin, 2010). These include improvements in early childhood development and nutrition, school attendance, reduction in child labour, improved health care utilization for sick children and household food security, increased health expenditure, self-reported health and assets (McCord and Himmelstine, 2013; UNAIDS, 2010; Stene et al., 2009; Temin 2010; Ainsworth et al., 2002). Another study from Mozambique found a small non-contributory pension to elderly caregivers of children orphaned from HIV/AIDS was used to meet consumption needs and finance investments to improve living conditions and access to education and health for family members (KULA, 2010).

Evidence of the impact of social assistance on families and children in economic crises is extensive, both from developed and developing countries. Studies show that statutory social assistance programmes are vital for cushioning children from the negative impacts of economic crises,

¹⁴ Angola, Bangladesh, Botswana, China, Ethiopia, India, Indonesia, Kenya, Lesotho, Malawi, Mexico, Mozambique, Namibia, Nepal, Nigeria, Pakistan, Papua New Guinea, South Africa, Swaziland, Tanzania, Thailand, Cambodia, USA, Vietnam, Zambia, Zimbabwe.

particularly cash transfers, and that design elements like targeting, coverage and transfer values influence the magnitude of impact.

Several studies find that social protection responses effectively reduced poverty and food insecurity and protected health during the global financial crisis. Among the studies that looked at developed countries, Martorano (2015) evaluated the quantitative impact of Australia's stimulus package in response to the global financial crisis on household poverty and consumption. The package included three one-off cash transfers: i) the Tax Bonus for Working Australians, based on taxable income, ii) the Back to School Bonus, targeted to low- and middle-income families with pre-school or school-age children, and iii) the Single Income Family Bonus, targeted to families in need, based on specific eligibility criteria.¹⁵ The results show that these payments were effective in reducing poverty and inequality. Effects were driven by the Back to School Bonus and the Single Income Family Bonus, which were more progressive and better targeted to low- and middle-income households compared to the tax bonus. In European countries with stronger welfare systems before the global financial crisis, the prevalence of unmet medical needs was lower, suggesting that targeted social benefits, together with redistributive taxation systems, offset the negative impacts on healthcare (Stuckler et al., 2017). A study of 22 European countries over the period 2006–2015, which overlaps the global financial crisis, finds that while spending on both cash and in-kind benefits was negatively and significantly correlated with child poverty, spending on in-kind benefits was consistently stronger, even when controlling for other variables and inserting the two independent variables simultaneously (Nygard et al., 2019). In the USA, one study finds that Medicaid expansion during the global financial crisis did not significantly impact physical health outcomes in the first two years, but reduced financial stress, increased use of health care services and detection and management rates of diabetes and decreased depression by 9.2 per centage points (Baicker et al., 2013).

The evidence is even larger for developing countries. Through microsimulations, Rasella et al., (2018) find that, compared to fiscal austerity, maintaining levels of investment in the national Bolsa Familia (conditional cash transfer) and national primary health care programmes during the 2014–2016 economic crisis in Brazil would result in fewer hospitalizations for children under five and an 8.57 per cent reduction in under-five mortality rates by 2030 than under fiscal austerity. Thus, maintaining social protection levels during economic crises rather than austerity prevents increased childhood morbidity and mortality in the long run.

In the Philippines, Indonesia and Thailand assessments show that cash transfer responses to the global financial crisis provided meaningful assistance to those most in need and mitigated the harsh effects of economic downturn on households' welfare (Green, 2010). Similarly, a cash transfer pilot targeting ultra-poor and labour-constrained households in Liberia, implemented by UNICEF between 2010 and 2014 in response to the global financial crisis and food and fuel crises, was found to improve the food security, health, education and economic conditions of participating households (UNICEF, 2015).

In other settings, the transfer value and coverage of pre-existing social assistance programmes influenced the extent and scale of impacts. For example, in Central Asia the vertical increase of non-contributory social cash transfers did not protect the population, especially the most vulnerable, from the financial crisis as these were already low in value and reaching a limited proportion of the population, not always the most in need (Gassmann, 2011). Expanding coverage and increasing

¹⁵ Eligible families are those entitled to receive the Family Tax Benefit B (FTB-B).

the benefit levels of social assistance instruments such as cash transfers can be an effective policy response for preventing reductions in healthcare use during crises (Gottret et al., 2009).

Microsimulations of different policy responses to the global financial crisis in Cameroon and Ghana suggest that cash transfers are more effective in poverty reduction than other policy responses, but not as effective in improving GDP growth. In Cameroon, cash transfers for poor children were compared against a reduction in the VAT on food products; elimination of tariffs on imports of food products; and free access to school canteens for children under the age of 15 in selected districts (Bibi et al., 2010). In Ghana, two counter-cyclical stimulus programmes are simulated: a consumption-oriented fiscal stimulus via cuts in consumption tax, and different combinations of targeted/universal cash/in-kind transfer to poor children aged up to five and up to 14 with different options for financing. One of the findings is that a cash transfer programme targeted to poor children would be more effective in protecting children than food subsidies, which could be particularly effective if built on existing programmes (Antwi-Asare et al., 2010).

The impact of cash transfers on child nutritional status during crises are mixed, similar to evidence from non-crisis contexts. CCTs in Nicaragua improved height-for-age z-scores for children aged six months to 48 months by 0.36 during the coffee crisis there however, another study finds that three CCTs in Mexico, Nicaragua and Honduras had no impact on stunting and height-for-age z-scores and concludes this may be explained by a substitution effect, with households diverting additional income at the benefit of older children (Maluccio, 2005; Gitter et al., 2011). There is evidence that food transfers improve the nutritional status of young children aged under five during crises. A supplementary feeding programme implemented in response to the 1997–98 Asian financial crisis in Indonesia decreased moderate and severe stunting in children aged 12–24 months during the crisis period, with larger effects for children exposed to the programme for a longer period of time (Giles and Satriawan, 2015).

Free distribution of food and food-for-work (FFW) programmes improved the anthropometric indicators of young children in communities affected by a persistent drought in Ethiopia in the period between 1994–97 although they had gender-differentiated impacts (Yamano et al., 2005; Quisumbing, 2003). However, cash transfers can be an effective instrument for improving micronutrient intake during crises. Evidence shows that income elasticity of key micronutrients such as iron, calcium and vitamin B1 was significantly higher during the 1997–1998 Asian financial crisis when compared to the previous year (Skoufias et al., 2011). This result is in line with findings from a study of the Food for Work (FFW) programs¹⁶, implemented by five NGOs in Indonesia, which found no effect on child and maternal anaemia, the main identified nutritional problem (Moench-Pfanner et al., 2005), suggesting that mere distribution of specific food items may not be successful in assuring key micronutrient intake during crises. Overall, the evidence from LMIC suggests that food aid and cash transfers can counteract detrimental effects of negative economic crises on child nutrition. Social assistance programmes can effectively reduce the risks of poor child health and nutrition for the most vulnerable households and offset negative child and maternal health outcomes, yet in times of crisis, need to be balanced in an effective policy mix ensuring the protection of the multiple dimensions of child welfare from the negative effects of shocks. It is important to reflect on designs and targeting approaches that are most responsive to crisis without adding unnecessary administrative burden (Fiszbein et al., 2011).

¹⁶ The FFW programmes were aimed at protecting food consumption levels and nutritional status by providing rice, sometimes combined with oil and beans, to vulnerable households in three urban sites and two rural sites in Indonesia.

Studies have mainly assessed the effects of CCTs on school enrolment and attendance in localized country-specific crises. For example, an evaluation of Mexico's Prospera found that the program effectively promoted children's school enrolment among households experiencing an income and/or unemployment shock during the tequila crisis in the mid-1990s (de Janvry et al., 2006). Similarly, an impact evaluation of the Nicaraguan Red de Protección Social (RPS) incorporating "a strong social marketing message that the money was intended to be used for human capital investments" found the program to be effective at increasing school enrolment in coffee-growing areas hit by the fall in coffee prices in the late 1990s (Maluccio 2005; Barham et al., 2013). The RPS produced an average net increase in enrolment of 18 per centage points and 23 per centage points in attendance for the target population whose initial enrolment and attendance rates were 70 and 62 per cent respectively (Maluccio, 2005). Additional gains were observed in both math and language achievement scores, while Barham et al. (2013) found that the positive effects of the programme on student learning were sustained, even after households stopped receiving transfers.

Other studies find that post-disaster cash transfers confer a wide range of psychosocial and socio-economic benefits to families and ultimately, children. The 2010 extreme floods in Pakistan had a significant negative impact on wealth and educational aspirations, equivalent to a decline in aspirations caused by a 50 per cent decrease in household expenditures (Kosec and Mo, 2017). However, recipients of post-disaster cash transfers experienced lower reductions in aspirations, demonstrating the role of social protection in blunting the impact of natural disasters by protecting mental health and increasing aspirations (Ibid.). After the Indian Ocean tsunami, cash transfers, cash for work, and vouchers provided in Indonesia, Sri Lanka and Aceh contributed to the psychosocial recovery and the livelihood rehabilitation of communities, meeting food and non-food needs, improving dietary diversity, boosting investments in farming, rebuilding shelters, reducing substance abuse and increasing joint decision-making within households (Adams, 2007).

School and health subsidies

School subsidies, such as scholarships¹⁷ and fee waivers are commonly adopted during crises, with an aim to reduce the cost of education and enable children to continue attending school at both primary and secondary levels. These transfers can be paid either directly to the school or to the families of school-going children (Marcus and Gavrilovic, 2010). Evidence on the impact of scholarship programmes in crisis contexts is limited but overall, it suggests positive effects in terms of school enrolment, retention and learning in LMIC (Snilstveit et al., 2015; Marcus and Gavrilovic, 2010; Cameron, 2001). For example, an Indonesian government scholarship program in response to the Asian financial crisis (1997–98) significantly reduced the probability of dropout at the lower secondary level by 25 per cent, an important achievement given that lower secondary school students are most susceptible to dropout and were in the position to benefit most from a programme (Sparrow, 2006; Cameron, 2001). Evidence from Kenya also suggests that merit-based scholarships for girls can improve equity of access for this group (James, 2018). In contrast, scholarships in Indonesia have been found vulnerable to leakage, political interference, or elite capture (Cameron, 2001). Global reviews of fee waivers has found fewer schools charge fees during crisis years but fee waivers had minor effects on enrolment, attendance, drop out, completion and attainment (Filmer et al., 2001; Snilstveit et al., 2015). However, one disadvantage of fee waivers is that they may lead to reductions in school budgets and resources with negative spillovers on the quality of service (Ibid.). During the 1997–98 East

17 In literature, scholarships can sometimes be considered and classified as social transfers.

Asian economic crisis, the Indonesian health card, for poor people to access subsidized care from public healthcare facilities, distributed as part of a larger Indonesian social safety net known as *Jaring Pengaman Sosial*, increased access to healthcare for children with an increase in sick children attending outpatient care as a result of health card possession (Suci, 2006). The card also increased the use of outpatient care by the poorest households and a substitution from private to public healthcare and greater card use by card owners who were less poor, an indication that the health card did not reduce supply-side barriers to access to services for poorer households¹⁸ (Pradhan et al., 2007; Sparrow 2008). Key lessons from the programme were the importance of effectively targeting the most vulnerable households and complementing the health card with interventions aimed at reducing barriers to access such as, for example, a reduction in transportation costs (Sparrow, 2008). These results, although limited and related to a localized crisis, highlight the importance of health waivers and subsidies in reducing detrimental effects of crises on healthcare utilization (Gottret et al., 2009). In contexts with no free access to healthcare services for all, health insurance or social assistance schemes such as fee waivers for treatment and medicines should be introduced or extended to target households and/or individuals at risk of poverty (Marcus and Gavrilovic, 2010; Gottret et al., 2009).

School feeding

School feeding programs are among the largest education-related, in-kind transfer schemes globally and are relatively easy to scale up in a crisis. Programmes generally have wide coverage¹⁹, reaching large swathes of vulnerable children (Bundy et al., 2009). During the global financial crisis, in the poorest and in middle income countries, school-feeding programs (e.g., in-school meals, fortified biscuits, take-home rations) were widely used to respond to income and food shocks (Ortiz et al., 2011; Bundy et al., 2009). Evidence from impact evaluations and qualitative assessments in Guyana, Argentina, El Salvador and Kazakhstan shows that school feeding programmes increased school enrolment and attendance and prevented dropouts. Additionally, they improved children's nutritional status, classroom behaviour and participation, and performance on standardized tests and were highly valued by beneficiaries (Ismail et al., 2012, cited in Snilstveit et al., 2015; Marcus and Gavrilovic, 2010; Gavrilovic et al., 2009). In Armenia, a school meal programme had marginal impact on social welfare and poverty compared to the national Family Benefit Program (FBP), an unconditional cash transfer (Bakhshinyan et al., 2019). A global review of school feeding programmes finds that they have positive effects on both participation and learning levels in crisis contexts (Snilstveit et al., 2015).

Evidence from LMIC contexts also suggests that school feeding programmes are most effective in terms of nutrition and cognitive development in contexts where malnutrition is prevalent (Bundy et al., 2009). They also perform best in combination with complementary measures such as cash transfers to ensure that the poorest children, who are often most chronically food insecure, are attending school. In the context of the current health pandemic, as most countries worldwide are closing their schools in response to COVID-19, an estimated 1.3 billion children are currently not attending school. Many of those children would miss out on school meals in both LMIC and high-income countries. Given the significance of school feeding schemes on household expenditure and consumption²⁰, and their importance for children's education and learning outcomes, during the COVID-19 pandemic, governments need to take action to support children who are currently not receiving school-feeding

18 The study finds that notwithstanding, while targeting was focused at the poorest households, leakage in the distribution of health cards to less-poor households occurred (Pradhan et al., 2007).

19 According to WFP, more than 300 million children across the world benefit from school-feeding schemes.

20 School meals can provide a benefit per household of more than 10 per cent of household expenditures (Ortiz et al., 2011).

with alternative income and/or in-kind support. For example, in the absence of school-feeding, governments can expand cash transfer programmes to compensate for school meals and/or provide meals or food through alternative channels. Emerging evidence suggests that since the COVID-19 outbreak began, an estimated 60 countries have provided alternative support to families and children, mainly through cash and/or direct food delivery, to safeguard children's immediate needs for food and cognitive development (Borkowski et al., 2020).

3.3 Social protection: Social insurance

There is evidence that social insurance programmes, especially government health insurance, can protect families and children from the adverse economic and health impacts of economic crises.

One study shows that unemployment benefits and food stamps in the USA were the most effective countercyclical programmes in relation to poverty (Bitler and Hoynes, 2016). An assessment of all public assistance programmes, including tax credits and social insurance programmes, in the US finds that the social safety net generally mitigated poverty during the great recession of 2007–2009 as losses in private income were offset by the social safety net (Bitler et al., 2017). However, the social safety net did not reach immigrant households (Marks-Solomon and Stoker, 2019).

Several studies find that increases in the duration of unemployment benefits in the US during the global financial crisis had a moderate negative impact on unemployment duration (Kroft and Notowidigdo, 2016; Farber and Valletta, 2015; Valletta, 2014; Rothstein, 2011). These findings were largely related to beneficiaries changing their labour force status from unemployed to job-seeking and withdrawing from the labour market once the benefits expired (Krueger et al., 2014). Farber and Valetta (2015) find that increased duration in unemployment insurance has no impact on job finding and that extended duration in benefits substantially contributes to increased long-term unemployment. Another study finds that a 10 per cent increase in unemployment insurance duration during the global financial crisis in the US decreased job applications within states and had no effect on job vacancies, with the resulting general equilibrium effect diminishing the impact of unemployment insurance on unemployment by 39 per cent (Marinescu, 2017). Despite their mixed record of effectiveness, the provision of unemployment benefits is one widely implemented social insurance response to the COVID-19 pandemic (Gentilini et al., 2020; see Box 2).

Social health insurance can increase access to healthcare during crises. In Indonesia, one study finds that between 2007 and 2014, which includes the global financial crisis timeframe, the national public health insurance programme increased the utilization of inpatient and outpatient care in the contributory group (public and private wage employees, informal workers and non-workers) and had a smaller positive impact on inpatient care in the non-contributory group (poor families and the disabled) (Erlangga et al., 2019).

A growing body of literature examines the impact of index-based weather insurance in mitigating the impact of climate shocks. Payouts from index insurance are not based on actual losses suffered by a household; rather they are triggered by a specific shock measure (such as district livestock mortality) that exceeds a threshold. Studies have found that index-based insurance strengthens recovery after climate shocks, protects livestock assets, increases agricultural production, and increases the use of irrigation, fertilizers and output in Mongolia and Bangladesh (Bertram-Huemmer and Kraehnert, 2017; Hill et al., 2019).²¹

Box 2: Global Social Protection Responses to the COVID-19 pandemic as at 17 April 2020

	Total	Social insurance programmes	Social assistance programmes	Labour market programmes
Number of programmes/countries	564 programmes 133 countries 622 million beneficiaries	134 56% are paid sick leave and unemployment benefits	352 193 are cash transfers or social pensions	78 60% are wage subsidies
Geographical patterns	102 countries in Europe and Central Asia, 26 in SSA 68% of responses in MIC (esp. upper MIC)	Sick leave in Algeria, El Salvador, Finland and Lebanon. Unemployment benefits in Romania, Russia, and South Africa. Deferring or subsidizing social contributions in Montenegro, Germany and the Netherlands.	102 in Europe and Central Asia. Most generous benefits in North America and Europe and Central Asia, almost double that of LAC.	Jamaica, Kosovo, Malaysia and Thailand. Activation measures (worker trainings) planned in Bosnia and Herzegovina, China and Romania.
Highlights			34% of all responses are cash transfers, representing 36% of monthly GDP per capita in low-income countries to 18% in upper MIC. Four countries with one-off universal cash transfers i.e., Japan, Serbia, Hong-Kong, Singapore.	
83 countries are providing child-sensitive programmes addressing the socioeconomic impacts of COVID-19 on children and their families.				
15 countries are providing coverage to informal workers through cash transfers, including in urban areas.				

Source: Gentilini et al., 2020; <www.ugogentilini.net>. Notes: LAC is the Latin America and Caribbean region, MIC is middle income countries, SSA is sub-Saharan Africa, GDP is gross domestic product.

21 Groh and McKenzie (2016) study microinsurance for businesses exposed to macroeconomic and political uncertainty in post-revolution Egypt. While take-up is high (37 per cent of microentrepreneurs buy insurance), having insurance does not change the likelihood that a business takes a new loan, the size of the loan, or how the loan is invested. This suggests that macroeconomic and political risk is not inhibiting the investment behavior of small firms. However, the lack of effect is also attributed to small firms largely investing in inventories and raw materials rather than irreversible investments, such as equipment. The paper cannot test whether insurance is effective in mitigating shock-related losses, because insurance did not pay out over the course of the pilot.

3.4 Social protection: Labour market policies and programmes

There is a body of literature showing that active labour market programmes (ALMP) can blunt the impact of economic crises on economic security and health. A cross-country study of 26 EU countries over the period 1970–2007, finds that a 1 per cent increase in economic crises-induced unemployment was associated with a 0.79 per cent increase in suicide among people younger than 65 years (Stuckler et al., 2009). However, a US\$10 per capita increased investment in ALMP decreased the effect of unemployment on suicide by 0.038 per cent. Stuckler et al. (2009) find that only ALMP had this dampening effect as compared to other instruments such as family-friendly policies and benefits, housing subsidies and benefits, and spending on medical services and drugs (Ibid.). In this study, ALMP includes public employment services and administration, labour market training, school-to-work transition programmes for youth, provision or promotion of employment for unemployed and other people (excluding young and disabled people), and special programmes for disabled people. Previous country-specific economic crises in Finland (Vuori and Silvonen et al., 2005) and Sweden (Westerlund et al., 2001) were characterized by high unemployment rates but declines in suicide, an effect linked to the implementation of ALMP like job search (Finland) and temporary alternative employment (Sweden).

Hiring subsidies, which help sustain new hires, were a cost-effective stimulus measure in European countries following the global financial crisis. Faia et al. (2013) simulate the effects of four fiscal stimulus measures on the ‘fiscal multiplier’, defined as the ratio between increase in output and policy cost. Using data from continental Europe, the authors find that increases in government spending and income tax cuts yield relatively small multipliers as they have little impact on hiring and firing decisions. By contrast, hiring subsidies and short-time work deliver large multipliers as they stimulate job creation and employment. In Mexico, throughout various economic crises, hiring subsidies and job intermediation services for large firms have proven to be effective in aiding recovery from economic shocks while policies targeting smaller firms have had short-lived effects and may even be detrimental to aggregate economic recovery (Epstein and Shapiro, 2017). However, the study does not assess distributional consequences. Labour market flexibility in hours of work can allow employees to keep their job during shock periods. During the global financial crisis, 25 of 33 OECD countries used short-time work, a policy that proved effective for preserving jobs (Balleer et al., 2016; Gehrke and Hochmuth, 2019). Overall, job creation and retention appear crucial to allow recovery after an economic crisis, as job losses may further decrease household consumption and thus exacerbate the effects of economic recession.

Labour market policies also proved to be relevant in response to natural disasters. In China, in the aftermath of a 2011 earthquake in Sichuan province, employment assistance policies indirectly boosted mental health via improved physical health. The most effective employment assistance policies were those that assisted survivors with employment transfers or encouraged firms to employ survivors and provide flexible employment or increased the coverage and level of assistance (Liang and Cao, 2015). In the Philippines during extreme weather events such as typhoons, hours worked and hourly wages for employees decline as a measure to avoiding layoffs, while managers increase hours worked in shock periods, suggesting that adequate management is an important component of a firm’s ability to deal with shocks (Franklin and Labonne, 2017). Various European countries are implementing short-time work models to avoid layoffs and counteract a spike in unemployment in the face of the COVID-19 crisis. Among these, Austria is implementing an innovative scheme which allows a temporary reduction in working hours of up to 90 per cent while maintaining the employment relationship and granting almost full wage (Schnetzer et al., 2020).

In LMIC, public works programmes can mitigate the impact of economic crises by addressing shortages in labour demand. Public works have been utilized in multiple crisis settings, including countries affected by regional financial crises (such as Indonesia and Argentina). An emergency public works programme during the global financial crisis increased household incomes by 37 per cent in Latvia, although applicants faced long waiting periods before starting participation (Azam et al., 2013). The Plan Jefes y Jefas, a public works programme implemented by Argentina during the 2001 financial crisis, partially compensated crisis-related income losses and contributed to extreme poverty reduction, notwithstanding substantial leakage to formally ineligible households (Galasso and Ravallion, 2004). Sumarto and Suryahadi (2003) highlight the importance of targeting flexibility during the Asian financial crisis in Indonesia. By comparing the targeting performance of sales of subsidized rice versus public works schemes, the authors find that the latter is much more responsive to expenditure shocks. However, age-eligibility in these programmes matters, and a study by Ha and Mendoza (2010) demonstrates that participation in the government's employment-creation programs in Indonesia was significantly and positively correlated with dropout among junior secondary students.

There is also some evidence of the role of pre-EVD outbreak programmes. A youth employment support intervention comprising monetary stipends, skills and on-the-job training improved household resilience to the Ebola outbreak in Sierra Leone by boosting consumption by more than 50 per cent, improving food security, promoting investments in housing conditions and assets of households, and improving employment and entrepreneurship of youths and their self-reported quality of life (Rosas et al., 2017).

3.5 Social services

There is evidence that spending on social services during crises is beneficial to children. Public spending, especially on health services, can alleviate the detrimental effects of economic crises on child health. Tejada et al. (2019) find that increased public health spending (as a share of GDP) reduces the detrimental effects of economic crises on child mortality rates in 127 countries over the period 1995–2014. Hone et al. (2019) find that the 2014–16 recession in Brazil increased all mortality by 8 per cent (notably among black/mixed race individuals and those aged between 30 and 59), and a key channel for this adverse impact was unemployment. The authors find that there was no increase in recession-related mortality in municipalities with high expenditures on health services and social protection.

A key factor for the success of demand-based schooling interventions is supply-side availability and quality of education services (Gentilini, 2016). The expenditures protecting the supply-side of the educational system are even more pertinent in crisis situations, given the typical contraction in social spending. School grants can be an important way for safeguarding school budgets in times of economic crisis and maintaining the quality of education, particularly in areas hardest hit by the crisis, or in schools serving vulnerable or marginalized communities (Bundy et al., 2009). However, the evidence on this dimension is quite scarce. Two examples discussed in the literature include Indonesia's Scholarship and Grants programme, and Zimbabwe's School Improvement Grant (James, 2018). Whilst there is very limited evidence of the effectiveness of Zimbabwe's policy, Indonesia's policy was associated with grants going to disadvantaged schools, but evidence of effectiveness for equity of access was more mixed (Ibid.). In the Philippines, school infrastructure programs were found to mitigate the negative effects of typhoons on education attainment. Children who benefited from the investments had a higher likelihood of being employed in high-skilled occupations, outside agriculture, compared to their peers who did not benefit from the programs (Hererra-Almanza and Cas, 2020).

3.6 Summary of key findings

The evidence reviewed in this section shows that macroeconomic and social protection responses have various impacts on children and families. As the appropriateness of a policy response depends on the type of shock, the evidence base on the various policy instruments also depends on type of crisis and the type of policy. For example, most studies on the impact of economic stimulus have been conducted in relation to financial crisis and focus on secondary effects at national levels, such as employment rates, poverty rates, and aggregated economic and fiscal indicators. Social assistance and insurance measures were studied in various contexts, ranging from financial crises to natural disasters, and were assessed both on primary as well as secondary effects. Instruments such as weather index insurance have been tested mainly in relation to droughts. Some policy instruments are more effective than others in improving child and family well-being.

Table II summarizes the evidence of the primary and secondary impacts of economic policy and social protection responses to crises on children. Various public policy responses to crises, including economic stimulus, cash and food transfers, school-based measures (subsidies and meals) and social services, have positive primary effects on children, especially on child health and health care utilization, school attendance, poverty reduction and child mortality reduction. Available evidence also shows that cash and food transfers medium- to long-term positive impacts on child health and education (e.g., impacts observed after two or more years of response). Similarly, most social protection responses have secondary positive effects on children via several channels, like the protection of family income, adult unemployment, job retention, adult suicide, adult physical and mental health, food security, assets, agricultural production, and livelihood. At the national level, fiscal stimulus protects from poverty, and attenuates fluctuations of real economy, employment and wages. Austerity has negative effects on childcare and parental caregiving, while labour market programmes targeting school-going children increase dropouts, and cash transfers sometimes fail to improve child nutrition. Secondary negative effects include gender inequality from gender-biased economic stimulus packages; austerity-driven infectious diseases outbreaks; homelessness; crime; poor mental health and suicide; long-term unemployment from unemployment benefits; reduction in school finances and quality of service from waivers; elite capture in scholarships.

- i Short-term effect: up to one year since policy response
- ii Medium-term effect: two, three years since policy response
- iii Long-term effect: more than three years since policy response

Table 2: Effectiveness of economic and social protection responses to various crises

Response	Short-term effects ⁱ + (positive), -ve (negative), 0 (no impact)	Medium-term effects ⁱⁱ + (positive), -ve (negative), 0 (no impact)	Long-term effects ⁱⁱⁱ + (positive), -ve (negative), 0 (no impact)
Macroeconomic measures			
Economic stimulus (e.g., bailout, monetary, increased budgets)	<u>Child level</u>	<u>Child level</u>	<u>Child level</u>
	<u>Household/Other level</u> + Poverty reduction / Income	<u>Household/Other level</u> + Real GDP Poverty reduction / Income	<u>Household/Other level</u> -ve Gender inequality (from favouring male sectors e.g., heavy industries)
Austerity	<u>Child level</u>	<u>Child level</u> -ve Parental care (children given to social service)	<u>Child level</u>
	<u>Household/Other level</u>	<u>Household/Other level</u> -ve Suicide Outbreak of infectious disease Homelessness Crime	<u>Household/Other level</u>
Social assistance			
Cash transfers	<u>Child level</u> + Schooling 0 Child labour	<u>Child level</u> + Poverty reduction Diet diversity / Nutritional status Schooling / Child labour 0 Nutritional status	<u>Child level</u> + Mortality rate, morbidity Healthcare use, health-seeking behaviour Schooling / Learning outcomes
	<u>Household/Other level</u> + Poverty reduction Food security Assets	<u>Household/Other level</u> + Poverty reduction Food security Quality of life / Psychosocial health	<u>Household/Other level</u> + Poverty reduction Food security Assets Morbidity / Health-seeking behaviour 0 Quality of housing

Response	Short-term effects ⁱ + (positive), -ve (negative), 0 (no impact)	Medium-term effects ⁱⁱ + (positive), -ve (negative), 0 (no impact)	Long-term effects ⁱⁱⁱ + (positive), -ve (negative), 0 (no impact)
Food transfers	<u>Child level</u> + Nutritional status (6-24 months) 0 Health (anaemia) (24-59 months)	<u>Child level</u> + Nutritional status (11-24 months; 6-24 months) 0 Nutritional status (25-59 months)	<u>Child level</u>
	<u>Household/Other level</u>	<u>Household/Other level</u> + Food security Quality of life	<u>Household/Other level</u>
School and health subsidies (waivers, scholarships)	<u>Child level</u> + Health care use Schooling (lower secondary; also for orphans) 0 Schooling (primary, upper secondary)	<u>Child level</u>	<u>Child level</u>
	<u>Household/Other level</u> + Healthcare use	<u>Household/Other level</u>	<u>Household/Other level</u> -ve School finances Quality of services Elite capture
School feeding	<u>Child level</u> + Schooling / Learning outcomes Nutritional status	<u>Child level</u> + Schooling / Learning outcomes Nutritional status	<u>Child level</u>
	<u>Household/Other level</u>	<u>Household/Other level</u>	<u>Household/Other level</u>
Social insurance			
Unemployment benefits	<u>Child level</u>	<u>Child level</u>	<u>Child level</u>
	<u>Household/Other level</u> + Poverty reduction 0 Job finding	<u>Household/Other level</u> -ve Unemployment Job search	<u>Household/Other level</u> + Unemployment
Health insurance	<u>Child level</u>	<u>Child level</u>	<u>Child level</u>
	<u>Household/Other level</u>	<u>Household/Other level</u> + Financial stress / Mental health (Depression) / Health care use 0 Physical health	<u>Household/Other level</u>

Response	Short-term effects ⁱ + (positive), -ve (negative), 0 (no impact)	Medium-term effects ⁱⁱ + (positive), -ve (negative), 0 (no impact)	Long-term effects ⁱⁱⁱ + (positive), -ve (negative), 0 (no impact)
Weather insurance	<u>Child level</u>	<u>Child level</u>	<u>Child level</u>
	<u>Household/Other level</u> + Agricultural input expenditures Area cultivated Assets	<u>Household/Other level</u> + Assets	<u>Household/Other level</u> + Assets
Labour market programmes			
	<u>Child level</u> -ve School drop-out (when secondary school age children are eligible)	<u>Child level</u>	<u>Child level</u>
	<u>Household/Other level</u> + Poverty reduction / Consumption / Income / Resilience Assets / Housing conditions Unemployment reduction / Job retention Employment and entrepreneurship (youth)	<u>Household/Other level</u> + Quality of life Physical health Mental health (including suicides)	<u>Household/Other level</u>
Social and public services (spending)			
	<u>Child level</u> + Schooling -ve Mortality rate	<u>Child level</u>	<u>Child level</u> + Health care use Quality of job -ve Mortality rate
	<u>Household/Other level</u>	<u>Household/Other level</u>	<u>Household/Other level</u>

Source: Authors' assessment based on the reviewed evidence.

4. KEY MESSAGES AND IMPLICATIONS ON POLICY RESPONSES TO THE COVID-19 PANDEMIC

4.1 Research implications

Based on our rapid review, the bulk of available literature pertains to the 2007–2008 global financial crisis and the related food and fuel price increase in 2007–08. There is also some evidence from regional or localized crises such as the Asian financial crisis (1997–98), the ‘tequila crisis’ in Mexico (1994–96) and the Latin American ‘coffee crisis’. We have also included evidence from rapid onset natural disasters (e.g., 2004 Indian Ocean tsunami, earthquakes in China) and to a lesser extent, from extreme weather events or droughts, mainly in sub-Saharan Africa. Evidence on economic policy and social protection responses to virus disease outbreaks was generally sparse with limited studies on the West Africa Ebola outbreak (2013–16) and scant evidence on MERS (2011), H1NI (2009) and SARS (2003). As for the effects of policy responses, most of the evidence from HIC and LMIC does not directly focus on children but rather on poverty, income, adult employment and to a lesser extent, physical and mental health. In LMIC, there is relatively more extended evidence based on child outcomes, such as school attendance, enrolment and dropout rates, as well as nutrition. In terms of economic policy and social protection responses to crisis, based on our search terms much of the evidence in our review is from studies of social assistance and labour market programmes and to a lesser extent, economic stimulus and social insurance programmes. The review uncovered limited evidence for social service reforms and information could not be found for social care services. Hence, this review of evidence is somewhat unbalanced in scope. However, the findings are still useful for informing current responses to the COVID-19 pandemic and future crises.

The review’s findings on the types of public policy responses and their effectiveness in improving child and family well-being raise further questions that need to be addressed in future research on the COVID-19 pandemic and further crises.

- **Voices of children and the marginalized:** As mentioned earlier, past responses to crises did not typically directly address children’s needs. Other vulnerable groups not informing responses include people living with disabilities, single mothers, the poorest families, the homeless and immigrants. There is need to hear from children and marginalized groups about how they cope with crises and their perspectives on which responses to crises are most needed, including during the COVID-19 pandemic. The latter has diverse multi- and intergenerational impacts, including severe illness and death among the elderly, adult unemployment, school closures, and decreased childcare services among others.
- **Role of pre-existing macro-level health, demographic and economic conditions:** Much of the reviewed evidence examines micro-level effects on households and children. The extent to which various macro-level pre-conditions within countries influenced policy responses to past crises remains unclear. Evidence points to pre-existing social protection infrastructure as an important catalyzing factor for a rapid social protection response. We need more evidence on the influence of pre-existing health systems, disease burdens, demographic structure, and GDP on public policy responses to crises. Elgin et al., (2020) study the determinants of policy responses for 166 countries and find that the median age of the population, the number of hospital beds per capita, the GDP per capita and the number of COVID-19 cases is positively associated with the magnitude of fiscal (including social protection), monetary and exchange rate responses (combined into one index). Moreover, the intensity of social distancing, movement restrictions and business/school closures as measured by the Stringency Index (Hale and Webster, 2020) is not correlated with

economic responses. This suggests that at present, policy responses are mainly focused on the need to control the pandemic (infections), with relatively less attention on the adverse economic effects of the stringent health measures (Elgin et al., 2020). Future research could use public or social expenditures as an outcome variable and/or consider additional country characteristics as determinants (e.g., political regime, levels of trust, social norms, population density). They can also continue to assess the macro-level predictors of public policy responses to COVID-19 in the medium- and long-term. In addition, future research could also compare humanitarian/fragile settings and normal settings and examine how the COVID-19 pandemic and future global crises exacerbated fragility and risks to children and families

- **Diverse health and economic impacts across regions:** Future research can assess the differential health and economic impacts of COVID-19 pandemic across regions with varying health systems and economic performance. Lessons from the HIV pandemic show that this evolved from a minimized spread in HIC to a widespread disease in low income countries. Research could also examine the short-, medium- and long-term gender and age-specific patterns of the COVID-19's impacts on morbidity and mortality in HIC and LMIC to understand whether the pandemic develops into a protracted health crisis in poor settings with immunocompromised people with HIV, TB, malaria and other diseases and weak health systems.
- **Impacts of fiscal/social protection expansion on children and families, and consequences of any scale-down:** It will be relevant to follow the development of recent expansions in social protection responses to the COVID-19 pandemic and assess effects on households and children; the effects of any future scale-down of these measures should also be assessed in various contexts.
- **Design and implementation:** Evidence on the moderating role of design elements during crisis responses is lacking. Design elements include targeting, coverage, benefit levels and duration (short vs. permanent). The cost effectiveness of various social protection instruments in different contexts can also be compared. The COVID-19 pandemic presents an opportunity for comparing these approaches in both HIC and LMIC.
- **Role of social care services:** Social care services will be critical in the response to COVID-19, particularly for strengthening child and family well-being and protecting vulnerable groups such as widows, orphans, migrants, or persons with disabilities. More research is required on the effectiveness of social care services in protecting children and ensuring their physical and emotional well-being during and after the pandemic.

4.2 Lessons that can inform public policy responses to the COVID-19 pandemic

Our review has examined the economic policy and social protection responses to previous crises and natural disasters and collated evidence of the effects of these policy responses on children. Based on the reviewed literature, we highlight key messages that can inform public policy response to the COVID-19 pandemic.

- **Economic stimulus and social protection responses must be child-sensitive and gender responsive to achieve sustainable impacts on wellbeing:** Pandemic policy responses have not, or have poorly addressed, the needs of children (O'Sullivan and Bourgoin, 2010) and countries risk repeating the same approach during the COVID-19 pandemic. While responses to past crises have generally minimized the negative impacts on children, specific children's needs and rights were rarely at the core of policy planning and were not always institutionalized in fiscal and social protection

policy (Harper et al., 2011; Soléa et al., 2020). On the contrary, social protection systems in some HIC favour the elderly. Children must be at the center of the key fiscal stimulus policies and social protection efforts during shocks like the COVID-19 pandemic and in long-term recovery. Evidence shows that child-specific and age-sensitive fiscal and social protection policies can mitigate the short- and longer-term detrimental effects of crises and spur human capital development (Barrientos and Nino-Zarazua, 2011; Fiszbein et al., 2011). Social transfers and school-based measures (subsidies/meals) proved effective tools in protecting children's direct needs such as health, nutrition and schooling during past crises, both in HIC and LMIC, and they mitigate the negative effects not only in the short-term but even in the long period (two-plus years from response), although most of the evidence is from LMIC (especially on cash transfers). Gender inequality is also exacerbated during crises like the COVID-19 pandemic as women lose their jobs, gain additional care responsibilities, lack assets, and experience GBV (from social distancing health measures and increased levels of stress due to worsened economic conditions). In the past, economic stimulus responses to the global financial crisis in some HIC were biased towards male-dominated sectors (e.g. heavy industries). Social assistance and unemployment benefits excluded young men who are at the highest risk for substance abuse and suicide. Further efforts are required to establish child-focused and gender-sensitive social protection systems to protect children and young people's welfare during and beyond crises.

- **Governments can leverage pre-existing social protection infrastructure and expansionary stimulus packages to expand coverage and introduce new social protection programmes:** The evidence shows that pre-existing statutory social protection programmes and reform processes are a springboard for effective and rapid social protection responses during crises (Fiszbein et al., 2011). The existence of social protection programmes, including cash transfers, has been an important factor in mitigating the effects of crises on poor families and children (Fiszbein et al., 2011; Harper et al., 2011; Barrientos and Nino-Zarazua, 2011). As experiences from the global financial crisis show, economic stimulus responses to the COVID-19 pandemic present windows of opportunity for HIC, MIC and LMIC to permanently or temporarily expand social protection coverage to more people, particularly vulnerable families and children in both the short- and long-term. Short-term responses typically include the raising or top-up of benefit levels, extension of duration of programmes, inclusion of new people or introduction of new programmes (Fiszbein et al., 2011; Bonnet et al., 2012). Increases in benefit levels should be substantial in cases where pre-existing values and coverage are already low and ineffective in protecting vulnerable families and children. Long-term responses usually include permanent countercyclical reforms for social benefits, addressing sustainability, and ensuring the transitioning of new programmes to permanence (Fiszbein et al., 2011; Bonnet et al., 2012). However, this capacity may vary across regions with LMIC currently still building permanent/statutory programmes and social protection floors (Ortiz and Cummins, 2013) while implementing short term/non-statutory social protection programmes. In LMIC, short-term emergency social protection measures to the COVID-19 pandemic can later be extended into permanent programmes or be combined with transitions into permanent programmes.
- **Near-poor, newly poor, informal workers and at-risk families and children must be covered by social protection responses to avoid entrenching poverty among these groups:** The evidence on past crises in LMIC shows that social protection instruments with targeting criteria applied before the crisis do not always account for newly poor or at-risk populations (Fernandez et al., 2011). Other instruments are more responsive to non-poor or newly poor populations e.g., self-targeted public works (Fernandez et al., 2011; Dammert et al., 2018; Gehrke and Hartwig, 2018). In addition, pre-existing social protection schemes in all settings largely exclude informal workers and immigrants,

hence any unmodified expansions could end up exacerbating exclusion and poverty. Emerging evidence suggests that the COVID-19 pandemic will substantially increase the number of poor people, particularly in developing regions like sub-Saharan Africa and in MIC, by an estimated nine to 35 million newly poor people (ILO 2020; McKibbin and Fernando, 2020; Vos et al., 2020). Social protection responses to COVID-19 should cover newly poor and at-risk or near-poor families and children, including informal workers and immigrants.

- **Targeting of social protection responses should be effective and efficient and not add to the administrative burden:** Evidence shows that in contexts where universal provision is unattainable, targeting the right vulnerable groups increases the effectiveness of social protection responses (Sparrow, 2008; Fiszbein et al., 2011). Targeting must minimize exclusion errors and account for often excluded groups such as informal workers and immigrants. Some forms of targeting (poverty targeting) can increase costs, the administrative burden and social tensions in LMIC (Heltberg, 2007).
- **There is a risk that expansionary fiscal and social protection responses to a severe crisis are followed by austerity policies that are detrimental to child well-being:** During the global financial crisis expansionary fiscal and social protection responses in most settings were short-lived; generally implemented between 2008 and 2010 (Martorano, 2014; Fiszbein et al., 2011; Ortiz and Cummins, 2013; Bonnet et al., 2012; Richardson et al., 2010); and later followed by austerity measures after 2010 which adversely affected population health, family incomes and child well-being (Stuckler et al., 2017; Legido-Quigley et al., 2016; Ortiz and Cummins, 2013; Bonnet et al., 2012; S; Karanikolos et al., 2013; Ifanti et al., 2013). The COVID-19 pandemic brings twin crises — health and economic — that will likely have long- lasting economic effects on all countries, especially low-income countries. Initial economic stimulus and social protection responses to the COVID-19 pandemic are substantially expansionary, especially in some HIC, hence there is a high risk that financial austerity will be used to control budget deficits and consolidate debt in the medium to long term. Social protection spending is vulnerable to later cutbacks after a medical breakthrough materializes.
- **Health systems must be strengthened during pandemics and severe shocks to ensure access to regular health care services by the general population and vulnerable groups (pregnant women, individuals with pre-existing medical conditions, young children):** The evidence shows that large-scale rapid-onset disease outbreaks and natural disasters overwhelm health systems, especially personnel, resources and the space for non-pandemic healthcare services such as inpatient care, immunization, ante- and postnatal care, and prevention of other diseases resulting in adverse impacts on child and maternal health (Tricco et al., 2012; Brolin Ribacke et al. 2016; Elston et al., 2017; Wilhelm and Helleringer, 2019; Delamou et al., 2017; Quaglio et al., 2019). The importance of health services is also reinforced in studies showing that increased spending on health services can alleviate the detrimental effects of economic crises on child and all-cause mortality (Tejada et al., 2019; Hone et al., 2019). During the COVID-19 pandemic, it is crucial that health systems are strengthened to ensure accessibility of regular healthcare services to the general population and vulnerable groups (pregnant women, individuals with pre-existing medical conditions, young children). Health measures for controlling outbreaks can be accompanied by social protection measures as the lack of social protection coverage perpetuates a vicious cycle of poverty and deprivation which diminishes health.

- **Build linkages between social protection and complementary interventions to enable holistic responses to a pandemic/crisis with detrimental multi-generational impacts on adults, parents, children and the elderly:** HIV/AIDS-sensitive social protection programming provides lessons in how to implement holistic responses to a pandemic with detrimental impacts on adults, parents, children and the elderly. In LMIC and among poor families in HIC or MIC with pre-existing vulnerabilities, the COVID-19 pandemic could contribute to prime age adult mortality and adverse effects on families and children. Holistic HIV/AIDS programmes target infected children and adults, those at risk of infection and those orphaned/affected by adult/parental deaths. They successfully integrate social protection with strong health care services, social work and child protection services to address the multidimensional impacts of illness and death on children in various situations, an approach that could be considered in responses to COVID-19 among the socioeconomically disadvantaged.

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ANNEX I. SEARCH TERMS

	DATABASE SEARCHED	Date of Search	Search Terms	Filters
Record identification and Screening	Elsevier (Scopus)	March, 2020	Impact AND policies AND 'financial crisis' AND 'child health'; impact AND policies AND 'financial crisis' AND 'child nutrition'; impact AND 'social protection' AND 'crisis' AND 'child health'; impact AND policy AND epidemic AND 'child health'; impact AND policy AND epidemic AND 'child nutrition'; effect AND policies AND financial crisis AND 'child health'; impact AND policies AND 'health crisis' AND 'child health'; impact AND policies AND 'health crisis' AND 'child nutrition'; 'health crisis' AND children AND Africa; impact AND 'social policies' AND 'financial crisis' AND 'healthcare utilization'; impact AND policies AND 'financial crisis' AND 'healthcare utilization'; impact AND policies AND 'health crisis' AND 'healthcare use'; impact AND 'policy responses' AND 'financial crisis' AND 'healthcare use'; impact AND 'social insurance' AND 'financial crisis' AND 'healthcare use'; impact AND policy AND 'Ebola outbreak' AND 'healthcare use'; impact AND 'policy' AND 'outbreak' AND 'healthcare use'; impact AND policy AND outbreak AND healthcare	Studies from 2000 onwards
	Medline	March, 2020	Impact AND policies AND 'financial crisis' AND 'child health'; impact AND policies AND 'financial crisis' AND 'child nutrition'; impact AND 'social protection' AND 'crisis' AND 'child health'; impact AND policy AND epidemic AND 'child health'; impact AND policy AND epidemic AND 'child nutrition'; effect AND policies AND financial crisis AND 'child health'; impact AND policies AND 'health crisis' AND 'child health'; impact AND policies AND 'health crisis' AND 'child nutrition'; 'health crisis' AND children AND Africa	Studies from 2000 onwards
	Medline	April, 2020	Impact AND 'social policies' AND 'financial crisis' AND 'healthcare utilization'; impact AND policies AND 'financial crisis' AND 'healthcare utilization'; impact AND policies AND 'health crisis' AND 'healthcare use'; impact AND 'policy responses' AND 'financial crisis' AND 'healthcare use'; impact AND 'social insurance' AND 'financial crisis' AND 'healthcare use'; impact AND policy AND 'Ebola outbreak' AND 'healthcare use'; impact AND 'policy' AND 'outbreak' AND 'healthcare use'; impact AND policy AND outbreak AND healthcare; crisis AND policy AND impact AND 'child health'; Ebola AND 'policy measures' AND impact AND evaluation AND 'child nutrition' OR 'child health' OR 'maternal health'	Studies from 2000 onwards
	Science Direct EBSCO EconLit	April, 2020	'Global financial crisis and children'; 'crisis, fiscal stimulus and children'; 'macro + global financial crisis and children'; 'impact+ policies+ financial crisis+ children'; 'impact+ policies+ education+ children'; 'impact+ policies+ global financial crisis+ families'; 'natural disasters and children'; 'impact+ policies+ natural disasters+ children'; 'impact+ policies+ education+ children'; 'evaluation+ policies+ disasters+ families'; 'Ebola pandemic and children'; 'impact+ policies+ Ebola+ children'; 'impact+ policies+ education+ children'; 'evaluation+ policies+ disasters+ families'; shock OR financial crisis OR severe acute respiratory AND social protection OR cash transfers OR social insurance; shock OR Ebola OR severe acute respiratory AND subsidy OR social services OR social security OR insurance; shock OR financial crisis OR food crisis AND subsidy OR social services OR social security OR insurance; impact OR effect AND shock OR financial crisis OR food crisis AND subsidy OR social services OR social security OR insurance	Studies from 2000 onwards
	Jstor	March, 2020	Impact intervention Ebola household	Studies from 2000 onwards

Record identification and Screening Record identification and Screening	DATABASE SEARCHED	Date of Search	Search Terms	Filters
	EconPapers Website	April, 2020	(Child OR Household OR Family OR Families OR Adolescent OR Youth) AND (shock OR crisis OR disaster) AND (mitigation OR response OR job OR employment OR firm OR fiscal OR stimulus) AND (impact OR effect); shock OR crisis OR Ebola AND impact AND social insurance OR social insurance OR transfers OR waivers; impact AND shock OR crisis OR financial crisis AND social insurance OR social insurance OR transfers OR waivers	Studies from 2000 onwards
	EconPapers Website	March, 2020	Economic impact intervention policy Ebola	Studies from 2000 onwards
	Google Scholar	March, 2020	economic crises policy response child mortality; global financial crisis policy response mortality; policy response great recession health effects; social protection Ebola crisis; impact AND 'policy measures' AND 'outbreak' AND 'child health'; impact AND 'policy response' AND crisis AND 'child health'; 'economic impact intervention policy' AND Ebola; impact AND 'cash transfer' OR 'social protection' AND Ebola OR EVD AND household; impact AND 'cash transfer' OR 'social protection' OR 'in-kind transfer' AND Ebola OR SARS OR EVD AND household; 'Global financial crisis and children'; 'crisis, fiscal stimulus and children'; 'macro + Global financial crisis and children'; 'in Africa'; 'impact+ policies+ financial crisis+ children'; 'impact+ policies+ education+ children'; 'impact+ policies+ Global financial crisis+ families'; 'impact' AND 'policy measures' AND 'outbreak' AND 'child health'; impact AND 'policy response' AND crisis AND 'child health'; impact AND 'social policies' AND 'financial crisis' AND 'healthcare utilization'; impact AND policies AND 'financial crisis' AND 'healthcare utilization'; impact AND policies AND 'health crisis' AND 'healthcare use'; impact AND 'policy responses' AND 'financial crisis' AND 'healthcare use'; impact AND 'social insurance' AND 'financial crisis' AND 'healthcare use'; impact AND policy AND 'Ebola outbreak' AND 'healthcare use'; impact AND 'policy' AND 'outbreak' AND 'healthcare use'; impact AND policy AND outbreak AND healthcare	Studies from 2000 onwards
	Google Scholar	April, 2020	'Social protection, pandemics, gender, families and children'; 'social protection, crises, gender, families and children'; 'social protection, pandemics, gender, family policies'; 'pandemics, gender, GBV'; 'crises, gender, GBV'; 'pandemics, gender, VAC'; 'impact programme mitigation tsunami'; 'economic impact programme mitigation tsunami'; 'employment jobs impact programme mitigation tsunami'; 'impact social protection response global financial crisis developing countries'; 'social protection natural disaster'; 'Ebola' AND 'policy measures' AND impact AND evaluation AND 'child nutrition' OR 'child health'; 'economic crisis' AND 'policy responses' AND impact AND transactional sex; 'diseases outbreaks' AND 'policy responses' AND impact AND 'transactional sex' OR 'sex work' OR 'risky sexual behaviors'; impact AND 'fiscal stimulus' AND 'financial crisis' AND 'child health'; impact AND 'fiscal stimulus' AND 'financial crisis' AND 'child nutrition'; impact AND 'cash transfers' AND 'crisis' AND 'child health' OR 'child nutrition' OR 'sexual and reproductive health' OR 'healthcare utilization'	Studies from 2000 onwards

Record identification and Screening	JOURNALS SEARCHED	Date of Search	Search Terms	Filters
	Journal of Development Economics	April, 2020	Mitigation OR shock OR crisis OR response OR job OR employment OR firm; fiscal stimulus AND shock; business support AND shock	Studies from 2000 onwards
	World Development Journal	April, 2021	Mitigation OR shock OR crisis OR response OR job OR employment OR firm; cash transfers AND shock AND economic impact	Studies from 2000 onwards
	Journal of Health Research	April, 2020	Mitigation OR shock OR crisis OR response OR job OR employment OR firm	Studies from 2000 onwards
	JOURNALS SEARCHED	Date of Search	Search Terms	Filters
	3ie Evaluations	April, 2020	'Global financial crisis and children'; 'crisis, fiscal stimulus and children'; 'macro + global financial crisis and children'; 'Impact+ policies+ financial crisis+ children'; 'Impact+ policies+ education+ children', 'Impact+ policies+ global financial crisis+ families'; 'Impact+ policies+ Ebola+ children'; 'impact+ policies+ education+ children'; 'global financial crisis and children'; 'crisis, fiscal stimulus and children'; 'macro + global financial crisis and children'; 'impact+ policies+ financial crisis+ children'; 'impact+ policies+ education+ children', 'impact+ policies+ global financial crisis+ families'; 'impact+ policies+ Ebola+ children'; 'impact+ policies+ education+ children'	Studies from 2000 onwards
	World Bank website; ILO website; IFPRI website	April, 2020	'Global financial crisis and children'; 'crisis, fiscal stimulus and children'; 'macro + global financial crisis and children'; 'impact+ policies+ financial crisis+ children'; 'impact+ policies+ education+ children', 'impact+ policies+ global financial crisis+ families'; 'impact+ policies+ Ebola+ children'; 'impact+ policies+ education+ children'	Studies from 2000 onwards
	Google website	March, 2020	Impact cash transfer intervention Ebola household	Studies from 2000 onwards
	Included	TOTAL STUDIES INCLUDED IN RAPID REVIEW		
	147			

ANNEX II. HOW DO HEALTH AND ECONOMIC CRISES AFFECT CHILDREN?

Health and economic crises have direct and indirect effects on children. The effects and the channels through which they are realized strongly depend on the type of crisis. For instance, epidemics affect the health of households and children directly, through the spread of the disease and indirectly, through the economic and social impacts of the measures taken to mitigate the crisis (Madhav et al., 2017). Financial crises have macroeconomic effects which indirectly affect children's health and education through intermediate impacts such as the reduction in provision of public services or declining social capital (Harper et al., 2011). The literature on the impacts of crises is vast and would require a separate comprehensive review. The primary goal of this review was to examine evidence on the type of public policy responses to crises and their impacts on children. Therefore, this section seeks to briefly highlight the adverse effects that typically motivate public policy responses discussed in Sections 3 and 4 and summarizes the secondary evidence identified during the review. Direct and indirect effects are described for the broader health, economic and education domains. We also assess impacts on the gender dimension, which has cross-cutting implications across these three domains. Finally, we outline impacts on social services supply and infrastructure, which can mediate the effects of interest.

Poor health and health care

As mentioned earlier, health-related crises affect children and families directly through the spread of disease. The 2009 H1N1 pandemic increased severe illness and mortality, especially among ethnic minorities in high income countries and individuals from low- and middle-income countries (LMIC) (Tricco et al., 2012). Health and mortality are also directly and indirectly affected by the impacts of disease outbreaks on health systems (supply-side) and health care utilization (demand-side) due i) to diversion of resources from regular healthcare to emergency-specific healthcare needs, and ii) to a reduction in the demand for healthcare services and access to healthcare facilities due to health-related policy restrictions, such as social distancing, quarantine regimes and travel bans as well as fear of contagion (Ibid.). The 2013–2016 West Africa Ebola outbreak decreased access to health care services, including services for pregnant women and young children, due to both supply- and demand-driven factors (Tricco et al., 2012; Brolin Ribacke et al., 2016; Elston et al., 2017; Wilhelm and Helleringer, 2019), which partially explain the deterioration in child and maternal health, both during the outbreak and after the outbreak ended (Delamou et al., 2017; Quaglio et al., 2019). Similar findings are presented in a more recent systematic review that identified impatient services including facility deliveries, obstetric care, and pre- and antenatal care as the most affected services during the outbreak (Wilhelm and Helleringer, 2019). Disease outbreaks also disrupt routine primary healthcare services such as malaria and vaccination coverage which also decrease during disease outbreaks (Brolin Ribacke et al., 2016; UNDP, 2014), leading to additional risks for children (Parpia et al., 2016). Disease outbreaks can also affect nutrition through secondary impacts driven by health-related directives (quarantining, social distancing, travel restrictions, etc.) on social and economic dimensions (Madhav et al., 2017). In Sierra Leone, a 21-day quarantine during the 2013–2016 Ebola outbreak disrupted the food value chain, reduced food supply and increased food prices, leading to a reduction in food intake for adults and children (Kodish et al., 2019). Similar results were found during the 2018 Ebola crisis in DRC (Alcayna-Stevens, 2018).

A large body of literature reports on the detrimental effects of economic crises on the health of children and of the most vulnerable (Rajmil et al., 2014; Rasella et al., 2018; Paxson and Schady, 2005). However, the findings vary depending on the context. A review of several studies from countries of

high, low, and middle income concludes that in those of low- and middle-income, the health status of children is procyclical, with morbidity and mortality rates increasing during economic shocks (Ferreira and Shady, 2009). The contrary is true for high income countries, where the health status tends to be countercyclical, with decreasing morbidity and mortality rates of children during recessions (Ibid.). During crises, households hit by an economic downturn in low- and middle-income countries tend to reduce their consumption levels and change their consumption patterns, in some cases leading to worsening health and nutrition conditions in children. The consequences of these coping strategies may lead to long-term losses in poverty reduction and human capital accumulation (Fiszbein et al., 2011). Several systematic reviews find that the 2008 global financial crisis and the related unemployment and foreclosure crisis in high income countries had negative impacts on physical and mental health, particularly on indicators such as the increased incidence of suicides, deterioration of mental health, decreased fertility and self-rated health, and increased morbidity with impacts particularly severe among men and racial/ethnic minorities (Margerison-Zilko et al., 2017; Parmar et al., 2016; Modrek et al., 2013).

Aggregate economic or health crises are associated with a sharp contraction of economic activities, widespread unemployment and a reduction in the value of real wages. This may be accompanied, as verified during the 1997-98 Asia financial crisis, by spikes in inflation for consumer goods and services as well as reductions in remittances (Jones and Marsden, 2010; Harper et al., 2011). Youth employment is especially vulnerable to economic shocks (financial and credit market crises, declining prices for products sold, increased prices for items purchased, business-cycle declines) as young people often engage in more temporary and unprotected work. The lack of job opportunities may also affect youth educational and occupational aspirations, with long-term effects in terms of future employment and income (Jones and Marsden, 2010; Lundberg et al., 2012). In Australia, youth unemployment rates significantly increased during the 2008 global financial crisis (Junankar, 2014). Pandemics can also decrease labour productivity. Studies not only find adverse consequences of influenza pandemics such as increased costs to health services (from hospitalization, treatment and households) but also loss of productivity which affects the economy (de Francisco et al., 2015, Gasparini et al., 2012). In Italy, estimates show that pandemic influenza (seasonal) costs about 940 per adult case (Gasparini et al., 2012).

Evidence from past economic crises shows that unfavourable macroeconomic conditions translate into reductions in household income and consumption at the microeconomic level (Jones and Marsden, 2010; Harper et al., 2011). In developing settings, where credit markets are less developed or non-existent, reductions in household income may be accompanied by the depletion of household assets in an effort to smooth consumption. These impacts are relatively stronger in developing countries, particularly in households at the lower percentile of income distribution (Zimmerman and Carter, 2003). This raises the risk of households falling into poverty or exacerbates poverty levels, as is expected with the COVID-19 pandemic (*see Box 1*). Declines in remittance inflows may also negatively affect household support structures, a dynamic likely to occur in the current COVID-19 pandemic as well (Ratha et al., 2020). Decreases in household income imply reductions in quantity and quality of food and services consumed by households.

Large scale income shocks, such as those caused by economic recessions, negatively affect children's schooling, especially in poor countries (Lundberg and Wuermli, 2012; Harper et al., 2011; Ferreira and Schady, 2009). For example, the 1997-98 financial crisis in Indonesia was associated with a spike in school dropouts, with the proportion of children aged seven to 12 years not enrolled in school doubling from 6 per cent in 1997 to 12 per cent in 1998 (Harper et al., 2011). However, the impact of previous

economic crises on schooling outcomes has varied substantially between and within countries (Cockburn et al., 2010). Ferreira and Schady (2009) find that aggregate economic shocks resulting from economic or financial crises do not always affect children's schooling, as compared to idiosyncratic shocks. For example, in high- and middle-income countries, education outcomes typically improve during recessions as they are counter-cyclical. On the other hand, school enrolment in low income countries declines during crisis (Ibid). This is particularly evident in contexts where social protection programs perform poorly and public spending on education is not maintained during the crisis. In such situations, poorer households are typically driven to reduce expenditure on education or to increase household income by sending their children to work, leading to reductions in education enrolment and academic achievements (Bundy et al., 2009).

Gender is an immensely important factor in dealing with pandemics or crises and gender impacts vary depending on the context, pandemic or crisis as well as the response. Women are generally more vulnerable to poverty, unemployment, loss of livelihood and gender-based violence than usual during crises. Evidence from financial crises suggests women's vulnerability to unemployment is compounded by the high concentration of women in temporary, casual, contracted and seasonal work, prime targets for cutbacks (Antonopoulos, 2009). For women, crises generally imply an increase in the burden of domestic work and higher exposure to domestic violence due to (pre-)existing gender stereotypes and sexual division of labour. Evidence from previous disease outbreaks — including the 2003 SARS outbreak and 2009 H1N1 influenza pandemic — show that in times of crisis, household and care responsibilities are mainly borne by women (O'Sullivan and Bourgoin, 2010). After the Indian Ocean tsunami, women in India, Taiwan, Sri Lanka and Somalia reported that they lost their livelihoods (fishing, tourism) and property rights, and single mothers and widows found it difficult to access relief due to childcare responsibilities and cultural rites for isolating widows (Akerkar, 2007).

While available data on domestic violence for women and children generally underreports the incidence, GBV and violence against children reportedly increased during the 2013 West Africa Ebola outbreak and a similar pattern has been reported for the COVID-19 pandemic (Peterman et al., 2020; Onyango et al., 2019). The Indian Ocean tsunami has also been linked with the increased incidence of intimate partner violence (IPV), sexual assault, child marriage, and divorce rates in India and Somalia (Akerkar, 2007). Evidence from the 2008 global financial crisis and Indian Ocean tsunami suggests that increased unemployment among men is accompanied by shame and despondence which, in some instances, resulted in suicide or destructive behaviours such as violence and IPV (Antonopoulos, 2009).

Health and economic crises also decrease access to, or provision of, social services crucial for children's well-being. During economic crises, investments in public services such as education or water and sanitation may also decline and this is accentuated when austerity measures are implemented. For instance, in South Africa the global financial crisis increased electricity prices, which raised the cost of electricity supply borne by municipalities and reduced consumption and payments by businesses and households (Steytler and Powell, 2010). The negative impact of recession on household incomes led to general non-payments for municipal services (water and property) and ultimately, reductions in municipal income (Ibid.). In the case of natural disasters such as tsunamis and earthquakes, there is also the destruction of physical infrastructure (bridges, roads, buildings) and communication systems (Ghobarah et al., 2006; Yeh et al., 2012).

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