# CONSIDERING HUMAN CAPITAL IN A MULTIDIMENSIONAL ANALYSIS OF FRAGILITY

Kathleen Forichon



#### **OECD DEVELOPMENT CO-OPERATION WORKING PAPER 80**

Authorised for publication by Jorge Moreira da Silva, Director, Development Co-operation Directorate



# **Working Paper**

OECD Working Papers do not represent the official views of the OECD or of its member countries. The opinions expressed and arguments employed are those of the authors. Working Papers describe preliminary results or research in progress by the authors and are published to stimulate discussion on a broad range of issues on which the OECD works. Comments on the present Working Paper are welcomed and may be sent to dac.contact@oecd.org — the Development Co-operation Directorate, OECD, 2 rue André Pascal, 75775 Paris Cedex 16, France.

This document, as well as any data and any map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

Please cite this paper as Forichon, K. "Considering human capital in a multi-dimensional analysis of fragility" OECD Development Co-operation Working Papers, No 80, OECD Publishing, Paris.

# **Abstract**

In 2022, the OECD will add a human capital dimension to its fragility framework in acknowledgement of the ambition set forth in States of Fragility 2018 to "never lose sight of the end goal of delivering hope and better lives for all people in fragile contexts". The coronavirus (COVID-19) pandemic and its associated fiscal, political and social shocks has brought the urgency of investment in human capital into sharper focus. With less than ten years left to go on Agenda 2030, success will mean placing further focus on the building blocks of sustainable development: health (including proper nutrition), education and financial support to those who need it through investments in social protection. This working paper builds the case for why human capital matters for fragility, and why investment in human capital can help develop more inclusive, peaceful and resilient societies.

# **Acknowledgements**

The author of this working paper is Kathleen Forichon, Junior Policy Analyst on the Crises and Fragility team of the Global Partnerships and Policy Division (GPP) in the Development Co-operation Directorate (DCD) of the OECD. This paper, which provides background to *States of Fragility 2020*, was written under the supervision of Jonathan Marley (Policy Analyst, GPP/DCD), Cyprien Fabre (Policy Analyst, GPP/DCD) and Paloma Duran y Lalaguna (Head of Division, GPP/DCD).

The author would like to thank the following people for their guidance, support and encouragement, noting that all errors and omissions are her own: Harsh Desai, Jonathan Marley, Yasmine Rockenfeller, Cyprien Fabre (OECD); Jonathan Papoulidis (World Vision); Duncan Green (Professor in Practice, Centre for Public Authority in International Development, Firoz Lalji Centre for Africa, London School of Economics and Political Science); and Filipa Schmitz Guinote (International Committee of the Red Cross), as well as all of the members of the *States of Fragility 2020* reference group.

Harsh Desai (OECD) contributed the section "choosing indicators" in the Annex of this paper.

Thank you to David McDonald for his editorial support.

# **Table of contents**

Working Paper	3
Abstract	4
Acknowledgements	5
Abbreviations and acronyms	8
Executive summary	9
1 What is human capital and why is it important? Human capital encompasses the knowledge, skills and good health that people accumulate throughout their lives, all of which can be supported through investments in health, education and social protection Human capital is an asset that can help people build sustainable livelihoods Human capital is one of multiple forms of capital that hold implications for lives and livelihoods	11 11 14 16
2 What role does human capital play in shaping fragility?  Fragile contexts are lagging behind when it comes to human capital  Human capital is an essential building block of sustainable development in fragile contexts that is vital to leaving no one behind  Human capital is multidimensional – it affects, and is affected by, all five dimensions of fragility	19 19 26 30
3 Why should human capital be considered within a multidimensional analysis of fragility?  Strengthening human capital can help develop more resilient societies  Supporting human capital can help place people at the centre of development policy and processes in fragile contexts  A "human capital" dimension will add a more nuanced layer of analysis, enhancing the rigour of the OECD Fragility Framework	35 35 35 36
References	39
Annex A. Analysing potential indicators for a human capital dimension in the OECD fragility framework Why these indicators? Choosing indicators	48 48 48

#### **Figures**

Figure 2.1. Human Capital Index scores of fragile contexts, extremely fragile and other fragile, 2017 Figure 2.2. Population coverage of social safety nets by type, fragile versus non-fragile, developing contexts Figure 2.3. DAC bilateral ODA to health, education, social safety nets, and water and sanitation in fragile contexts, 2010-18 Figure 2.4. Human Capital Index scores of fragile contexts, by gender, 2017	20 23 26 29
Boxes	
Box 1.1. The five forms of capital in the SLA Box 1.2. Social capital and fragility Box 2.1. Poverty in fragile contexts Box 2.2. The effect of increasing human capital investment on economic growth and poverty	16 18 27 32

# **Abbreviations and acronyms**

DAC Development Assistance Committee (OECD)

GDP Gross domestic product
HCI Human Capital Index

INFORM Index for Risk Management
MPI Multidimensional Poverty Index
ODA Official development assistance

OECD Organisation for Economic Co-operation and Development

PSNP Productive Safety Net Programme

SDG Sustainable Development Goal

UN United Nations

UNDP United Nations Development Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

UNICEF United Nations Children's Fund

USD United States dollar

# **Executive summary**

Fragility reverberates globally, locally and at the individual level. Indeed, beyond macro-level data and analysis, fragility is an individual experience – impacting people's lives, livelihoods, well-being and sense of hope for the future. *States of Fragility* 2018 calls for the inclusion of people in fragile contexts as arbiters, and for the introduction of alternative metrics to weigh success in order to better ascertain if development is being delivered in a manner that does no harm, builds resilience and reinforces the social contract. In considering the need for "alternative metrics to weigh success", and in continuing to develop the OECD Fragility framework as a tool for policy makers and practitioners to identify the risks and coping capacities that shape fragility, it will be important to further highlight areas where donors can provide clear and tangible support for people-centred policies. Indeed, the COVID-19 crisis and its impact on the global economy challenge the ability of governments to ensure the well-being of their populations, and emphasise the importance of having the right mechanisms to do so effectively.

Human capital is an essential building block of sustainable development in fragile contexts, and a powerful asset. It is a measure of the knowledge, skills and health that people accumulate over their lives, and is an asset that improves well-being, supports potential, and helps people to build sustainable livelihoods. Human capital helps people to build sustainable livelihoods by providing them with the tools they need to be resilient: to cope with and recover from stresses and shocks while maintaining or improving their capabilities and assets in the present and the future. Indeed, investing in human capital can result in better health and education outcomes, which can support the accumulation of other capabilities and assets in the future. This allows people the agency to engage in different livelihood strategies, empowers them to achieve their life goals, aspirations and hopes while supporting the best possible outcomes for themselves and their families, even in the face of unforeseen events. Human capital can be supported through investment in health, education, and social protection, including through investment in healthcare, clean water and sanitation, primary, secondary, and tertiary education, and social protection.

The OECD Fragility Framework provides a (previously lacking) language to analyse the intersection of risk, resilience and fragility in order to inform complex and systems-based approaches, which help move beyond mono-causal explanations of fragility that fail to account for broader system dynamics, interconnectedness, and intersectionality. Human vulnerability and resilience are two key factors that influence, and are influenced by, fragility at all levels (e.g. individual, community, system, and state), and across all dimensions (e.g. economic, environmental, political, societal and security). Because it sheds light on certain sources of human vulnerability and resilience (e.g. health, education, and social protection), analysing the human capital of populations in fragile contexts is useful for understanding how issues that matter to people can interact with fragility at all levels and across dimensions. Indeed, human capital can impact earnings, employment and economic growth, but it can also be a factor in supporting stronger

<sup>&</sup>lt;sup>1</sup> The OECD analyses fragility across economic, environmental, political, security and societal dimensions – and characterises fragility as the combination of exposure to risk and insufficient coping capacity of the state, systems and/or communities to manage, absorb or mitigate those risks (OECD, 2020<sub>[52]</sub>). Additional information on each dimension and what it measures, as well as the methodology for States of Fragility, is available on the States of Fragility platform (OECD, 2020<sub>[39]</sub>).

institutions and developing peaceful and inclusive societies. Conversely, weak economies, ineffective institutions, inequality and conflict can all have negative impacts on human capital.

Adding a human capital dimension to the OECD Fragility Framework will provide tangible evidence for the connection between people's lives and fragility. In doing so, it will a help development partners better support the capacity of governments in fragile contexts to invest in their populations' well-being, potential, and ability to build sustainable livelihoods. It will also help leverage human capital's benefits in order to continue striving towards building resilience at the individual, community, system, and state levels, helping better prepare for, understand and respond to the shocks associated with crises, and take a step towards building more resilient societies that leave no one behind.

#### **Key messages**

# Chapter 1: Human capital is an asset that can help people build sustainable livelihoods, and can be supported through investments in health, education and social protection.

Human capital is one of five assets or "capitals" (e.g. social, natural, physical, and financial) that can help people build sustainable livelihoods – helping them to cope with and recover from stresses and shocks, while maintaining or improving their capabilities and assets both now and in the future. Although it is important to consider all forms of capital when it comes to mitigating risk and building resilience, human capital is needed to leverage all other forms of capital, making it vital for the achievement of positive results in any dimension. The core components used to measure an individual's human capital are health and education, while human capital can be supported through investments in health (including nutrition, clean water and sanitation), education, and social protection.

## Chapter 2: Human capital is an essential building block of development in fragile contexts, and holds implications across the five dimensions of fragility.

With all but one of the 47 fragile contexts measured in the World Bank's Human Capital Index (HCI) falling below the worldwide average, fragile contexts are lagging behind in human capital. The COVID-19 pandemic and its associated fiscal, political and social shocks have brought the urgent need to invest in human capital into sharper focus. Indeed, access to good health, quality education, and adequate social protections are vital dimensions of well-being, the lack of which can render devastating results for populations during times of crisis. The relationship between human capital and fragility spans a wide spectrum of issues that link across the economic, environmental, political, societal, and security dimensions of fragility, affecting people, communities and societies. In order to address the challenges to Agenda 2030, including the consequences of the COVID-19 pandemic, proper investment in health, education and social protection will be vital.

# Chapter 3: Analysing human capital can help place people at the centre of development policy in fragile contexts, building more resilient societies and enhancing the OECD fragility framework

Fragility is often prolonged and ingrained, and development partners will only be effective if they can address its root causes and support processes from within. Recognising the importance of investing in health, education and social protection is vital for saving lives and protecting the most vulnerable, for promoting growth and for serving as a form of resilience against future crises. Adding a human capital dimension to the OECD Fragility Framework will offer a more robust analysis to promote a better understanding of what shapes fragility form the perspective of the individual. This understanding can help development partners support the capacity of governments in fragile contexts to invest in their populations' well-being, potential, and ability to build sustainable livelihoods.

# 1 What is human capital and why is it important?

Human capital encompasses the knowledge, skills and good health that people accumulate throughout their lives, all of which can be supported through investments in health, education and social protection

Human capital can be broadly defined as the knowledge, skills and health that people accumulate over their lives that improves well-being, supports potential and helps people to build sustainable livelihoods (UNDP, 2017<sub>[1]</sub>; World Bank, 2018<sub>[2]</sub>). When combined these can become a powerful asset, providing populations with the capabilities and assets they need engage in different livelihood strategies, which in turn can empower them to achieve life goals, aspirations and hopes, support the best possible outcomes for themselves and their families, and cope with unforeseen events (UNDP, 2017<sub>[1]</sub>). The following sections examine how human capital it is measured, and how it is supported: through investments in health (including proper nutrition, clean water and sanitation), education and financial support to those who need it through social protection (Manuel et al., 2018<sub>[3]</sub>).

#### How is human capital measured?

Efforts to measure human capital typically assess two stock values which are embodied in people: health and education (Botev et al., 2019<sub>[4]</sub>). Human capital's value cannot be determined by an individual's existing knowledge and experience alone (UNDP, 2017<sub>[1]</sub>), and most measurements also include an assessment of an individual's potential to acquire new knowledge and remain healthy in the future. The World Bank's Human Capital Index (HCI), for example, measures the "human capital of the next generation, defined as the amount of human capital that a child born today can expect to achieve in view of the health and education risks currently prevailing in the country where they live" (World Bank, 2018<sub>[2]</sub>).

Although there is general agreement regarding these core components, debate persists as to how they should be translated into useful measurements.<sup>2</sup> In discussing the human capital of populations in fragile contexts, this working paper does not adhere to any specific indicators, referring more broadly to existing levels of health and education, as well as the potential for people to maintain the health and gain the knowledge necessary to support their future needs.

#### How is human capital supported?

Support for human capital is an investment in the future. By investing in the human capital of their populations, countries can generate returns at the individual, community and state levels - promoting

<sup>&</sup>lt;sup>2</sup> A recent example of a quantified measure of human capital is the World Bank's Human Capital Index (HCI), which divides human capital into three core components: "survival, expected years of learning-adjusted school, and health" (World Bank, 2018<sub>[15]</sub>).

resilience and helping to maximise the potential of people to live prosperous lives – and across an array of dimensions, notably in labour performance as well as cultural and other non-monetary gains (UNDP,  $2019_{[5]}$ ; Flabbi and Gatti,  $2018_{[6]}$ ). Investment in human capital also generates lasting returns, while multidimensional deprivations in health, education, and standard of living can have a trapping effect on individuals and households (Corral et al.,  $2020_{[7]}$ ). Intergenerational mobility describes socioeconomic movements between generations, and is indicative of the long-term effects of human capital, or a lack thereof. In other words, the more human capital an individual acquires early on in life, the more effective future investments will be – including for generations to come (Manuelli and Seshadri,  $2014_{[8]}$ ). However, without a solid foundation early in a person's life, subsequent investments in human capital are less likely to be effective while a spiral of increasing inequality will be more likely to develop (Flabbi and Gatti,  $2018_{[6]}$ ; Corral et al.,  $2020_{[7]}$ ).

#### Health and education

Investments in health and education are widely accepted as necessary avenues for support to human capital. Under the right circumstances, more and better education and proper healthcare can lead to increased productivity in the workplace and thus higher earnings, reduced inequality, and the overall economic and social empowerment of people, and for their children. Although health and education are beneficial at all stages of life, they play an especially important role in early childhood development by promoting foundational cognitive skills, lowering child mortality and reducing stunting through proper nutrition. A lack of proper investment in these areas can diminish peoples' potential for growth and affect well-being and livelihood outcomes for the rest of their lives (Psacharopoulos and Patrinos, 2018<sub>[9]</sub>; Gilleskie and Hoffman, 2014<sub>[10]</sub>; World Bank, 2019<sub>[11]</sub>).

The benefits of education are determined by the real cognitive skills that an individual develops during their time in school (World Bank,  $2019_{[11]}$ ; Santos,  $2009_{[12]}$ ). The development of cognitive and socio-behavioural skills produced by a quality education early on are foundational, and can affect the success of human capital outcomes in the future by making skills acquisition more resilient to uncertainty (World Bank,  $2019_{[11]}$ ). From the prenatal period to age five, the brain's ability to learn from experience is at its highest level. Consequently, experiences and learning during this period directly affect achievement in adulthood. If this window is missed, attempts to build skills become harder over the long term. Indeed, the average private and social rates of return on investment in education (taken from low, middle and high-income countries) are highest at the primary level – at 25.4% and 17.5%, respectively (Psacharopoulos and Patrinos,  $2018_{[9]}$ ).<sup>3</sup>

Secondary and tertiary education remain important for building human capital, however. More school in general generates higher earnings on average – with a world average of private returns to schooling at a rate of 8.8% (Psacharopoulos and Patrinos, 2018<sub>[9]</sub>). This outcome that is especially true for populations in low and middle-income countries, and even more so for women, whose overall private returns on investment in education exceed that of men by 2 percentage points (World Bank, 2019<sub>[11]</sub>; Psacharopoulos and Patrinos, 2018<sub>[9]</sub>). Higher education and training help to develop higher-order cognitive skills (e.g. complex problem-solving, critical thinking and advanced communication), which can make people more adaptable to technological change (World Bank, 2019<sub>[11]</sub>). Socio-behavioural skills that people gain throughout the education process can also encourage them to be more open and accepting of others,

\_\_\_

<sup>&</sup>lt;sup>3</sup> The rate of return to schooling equates the value of lifetime earnings of the individual to the net present value of costs of education. The private returns amount to how much extra an educated individual earns (after taxes) compared with an individual with less education, while the social rate of return includes the full resource cost of the investment – including the subsidisation of education by the government (Psacharopoulos and Patrinos, 2018<sub>[9]</sub>).

<sup>&</sup>lt;sup>4</sup> This does not necessarily mean that earnings are higher for women, but instead that investment in women's education should be a development priority (Psacharopoulos and Patrinos, 2018<sub>[9]</sub>).

helping to foster inclusiveness and social cohesion within societies (World Bank, 2019[11]). Conversely, lack of proper schooling can also hold implications for the future. Children in poor households who receive an education of sub-standard quality will not acquire the foundations necessary for developing advanced cognitive and socio-behavioural skills— with strong individual and societal repercussions (Santos, 2009[12]; World Bank, 2019[11]). If not addressed, this impact can span across generations. Indeed, levels of child skills are highly correlated with family background factors such as parental education and maternal ability (Cunha and Heckman, 2007[13]).

In addition to education, investment in health is essential to reap the benefits of human capital. Prioritising health can be a catalyst for a broader virtuous cycle of growth, and can affect livelihood outcomes for people at all stages of life. Health and poverty are inextricably linked – poverty affects health, and health affects economic well-being (Kim, 2018<sub>[14]</sub>). Indeed, healthy populations earn more on average (World Bank, 2018<sub>[15]</sub>), and studies show that programmes providing health services for workers and children can raise earnings significantly (World Bank, 2019<sub>[11]</sub>). For every USD 1 invested in health across developing countries there is an economic return of USD 2 to USD 4 (Remes, Wilson and Ramdorai, 2020<sub>[16]</sub>).

Nutrition is absolutely critical for children's cognitive and physical development – and is vital to prevent stunting and wasting, which can have significant health impacts on an individual's life for years to come. Proper nutrition in early childhood can make children more likely to excel in school (World Bank, 2019[11]), and can also have an impact on earnings: a one-fifth reduction in stunting in early childhood development can generate an increase in income of 11% later in life (Hoddinott and Alderman, 2013[17]). Mental health can also be predictive of outcomes for children that are likely to persist into adulthood. Indeed, early problems with mental health have been found to have independent and continuing negative effects on children's future test scores (Currie and Stabile, 2009[18]). During adulthood, untreated health conditions can have negative impacts on people's livelihoods, forcing them to change occupations, or employers, and face a consequent decline in earnings (Gilleskie and Hoffman, 2014[10]). Similarly to education, negative health outcomes can have intergenerational implications: a mother's stock of health (the accumulation of which begins at birth) can have an effect on the health and life chances of her children through increased risk of infant mortality and stunting (Bhalotra and Rawlings, 2013[19]).

Early and continued investments in health and education lay strong foundations for the futures of individuals, communities and societies. They can help build human capital by making the path toward the acquisition of future skills and knowledge more resilient to uncertainty, which is important for helping to address poverty and inequality, and improving intergenerational mobility. Prioritising investment in education and health could pay off significantly for people and economies, as long as both access and quality are a focus (World Bank, 2019[11]). Governments can increase proper access and quality by reinforcing health and education systems, along with others that affect the health and education outcomes of populations, such as food security and clean water and sanitation. Governments should also improve the alignment of health and education systems with social protection, which can help to address financial, social, physical and economic constraints to equitable access (UNICEF, 2019[20]; McDonnell, Anthony; Samman, Emma, 2020[21]). The next section define the role that social protection plays in supporting human capital.

#### Social protection

Social protection can help ensure individuals' ability to fulfil their future needs, including during times of crisis. Indeed, certain individuals and families are not able to support their own human capital, for reasons such as an inability to afford the costs of investment in health and education, a lack of access to systems, resources or information, or because of social marginalisation (Flabbi and Gatti, 2018<sub>[6]</sub>). Countries around the world and throughout history, including OECD countries, have used social protection programmes to assist their populations through contingencies such as unemployment, disability and sickness and pensions (OECD, 2014<sub>[22]</sub>).

The purpose of social protection is to reduce the economic and social vulnerability of populations, especially (but not limited to) poor and marginalised groups (Devereux and Sabates-Wheeler, 2004<sub>[23]</sub>). It encompasses all public and private initiatives that aim to protect people against livelihood risks and enhance the social status and rights of the marginalised – helping individuals and families to weather shocks while investing in their futures (Green, 2012<sub>[24]</sub>; Devereux and Sabates-Wheeler, 2004<sub>[23]</sub>). When implemented correctly, social protection should seek to address the structural causes of chronic vulnerability, provide long-term, sustainable solutions to inequality and inter-generational cycles of poverty, and promote resilience among people. Social protection systems can help individuals and families cope with shocks and crises such as civil war, natural disasters, displacement and others. They can also help people weather individual shocks, such as sickness or unemployment, and can help build human capital by connecting people to jobs, investing in the health and education of children, and providing financial support to those who need it (Rutkowski, 2018<sub>[25]</sub>). Indeed, by increasing access to income, information and services, and by protecting them against crises, social protection enables people to build and maintain their own human capital and that of their families (World Bank, 2020<sub>[26]</sub>; Devereux and Sabates-Wheeler, 2004<sub>[23]</sub>).

Social protection encompasses a wide variety of programmes that fall under three broader categories: social safety nets, social insurance and active labour market policy (Hanna and Cheah, 2020<sub>[27]</sub>). Social safety nets include programmes such as in-kind or cash transfers, social insurance includes pensions, health insurance and unemployment insurance, and active labour market policy may include minimum wage programmes, wage subsidies or skills training that helps transition workers from non-productive to growing industries (Hanna and Cheah, 2020<sub>[27]</sub>). These forms of social protection can have protective, promotive and/or transformative functions. They can help avert deprivation by directly addressing poverty through programmes such as social pensions, enhance incomes and capabilities through a range of programmes such as school feeding, or address concerns of social equity and exclusion through changes to regulatory frameworks such as collective action for workers' rights (Devereux and Sabates-Wheeler, 2004<sub>[23]</sub>; FAO, 2008<sub>[28]</sub>).

Adaptive social protection systems ensure that investments in human capital are not undermined by crises or shocks – not just for the poorest, but for all crisis-affected populations. They aim to meet critical needs of those who are currently poor and of those who are vulnerable to becoming poorer in the face of a shock. Adaptive social protection can help provide crisis-affected populations what they need to recover, as well as finance and deliver support to them in times of crises. These systems can then be used as a platform for other interventions in health, education, and other social services (Rutkowski, 2018<sub>[25]</sub>).

#### Human capital is an asset that can help people build sustainable livelihoods

Human capital as an asset that can help people build and maintain sustainable livelihoods. Livelihoods are sustainable when individuals and communities can cope with and recover from stresses and shocks while maintaining or improving their capabilities and assets – both in the present and the future (OECD, 2014<sub>[29]</sub>; DFID, 1999<sub>[30]</sub>; UNDP, 2017<sub>[1]</sub>). The Sustainable Livelihoods Approach (SLA) is a good basis for analysing the resilience of individuals, households, and communities (OECD, 2014<sub>[29]</sub>). Within the SLA, human capital is one of five assets that affect the well-being of people and communities – providing them with the tools and capabilities that they need to be resilient.

Considering the role of human capital in multidimensional analysis of fragility means defining its function within a broader framework of analysis, in order to showcase the interactions between people's well-being and the complex systems that shape fragility or drive resilience. Defining human capital as an asset within the SLA reflects the aim of the OECD fragility framework to be multidimensional and people-centred. By showcasing factors of human vulnerability and resilience, it can help to better highlight how issues that matter for people interact with fragility at all levels and across dimensions.

#### The Sustainable Livelihoods Approach

Assessing a population's level of human capital is useful because it provides measurable evidence for returns on investment in people. Traditionally, these returns are seen most clearly in the positive correlation between increased human capital and economic growth and productivity (Collin and Weil, 2020<sub>[31]</sub>; Botev et al., 2019<sub>[4]</sub>; World Bank, 2018<sub>[2]</sub>). This makes human capital a useful tool for measuring the impact of individual levels of health and education on a context's economic development, providing one example of how people's well-being can impact fragility, specifically in the economic dimension. However, human capital amounts to more than just an indicator for economic fragility – and its benefits can manifest in a variety of ways depending on the context and circumstances. When considering human capital's role in a multidimensional analysis of fragility, it is therefore important to define it within a framework that allows us to consider human capital's links with fragility in a broader sense. This includes economic growth and productivity, but there are other links to consider as well. These are explored in further detail in Chapter 2.

The Sustainable Livelihoods Approach (SLA) is a conceptual framework that analyses peoples' livelihoods using an asset and vulnerability approach (Norton and Foster, 2001<sub>[32]</sub>). According to the SLA, a livelihood consists of the capabilities, assets (both material and social) and activities that people require to live and survive (UNDP, n.d.<sub>[33]</sub>). A livelihood is sustainable when it allows people to cope with and recover from crises, and maintain or improve their capabilities and assets in the present and the future, while not undermining a context's natural resource base (DFID, 1999<sub>[30]</sub>; OECD, 2014<sub>[29]</sub>; UNDP, 2017<sub>[1]</sub>). The SLA measures the well-being of individuals according to five different categories of assets or "capitals" that help individuals and communities build sustainable livelihoods. These consist of human, social natural, physical and financial capital (OECD, 2014<sub>[29]</sub>; DFID, 1999<sub>[30]</sub>). People employ livelihood strategies (e.g. agricultural intensification and extensification, livelihood diversification or migration) to gain access to these forms of capital (Scoones, 1998<sub>[34]</sub>; DFID, 1999<sub>[30]</sub>). Although the term "capital" is used to describe these assets, not all of them are capital in the strict economic sense of the term. Instead, the SLA considers these assets more as "building blocks" for sustainable livelihoods (DFID, 1999<sub>[30]</sub>).

The SLA is a system of well-being that provides a good basis for analysing the resilience of individuals, households and communities (OECD, 2014<sub>[29]</sub>). According to the core sustainable livelihood principles, effective support must focus on what matters to people, and work with them in a way that is congruent with their current livelihood strategies, social environment and ability to adapt (Norton and Foster, 2001<sub>[32]</sub>). As a framework of analysis that aims to place people at the centre of development, thereby increasing the effectiveness of development assistance (DFID, 1999<sub>[30]</sub>), the SLA provides a framing of human capital that is useful when considering its role within a multidimensional approach to fragility. The next section elaborates further on the SLA through a discussion of the different types of capital, and how they interact to help people build sustainable livelihoods.

#### Human capital plays a central role in building sustainable livelihoods

Human capital's intrinsic value as an asset and its position in the SLA render it the best choice out of the five capitals to serve as a new dimension within the OECD fragility framework. As a product of investment that yields a flow of benefits over time, it is a useful means of quantifying the outcomes of increased well-being. As a property of individuals, it is also the form of capital that most directly represents people, making it a solid form of evidence in support of people-centred policies. Aside from its intrinsic value as an asset, human capital also plays a central role in the SLA because it is a requirement to leverage the benefits of any of the other forms of capital (DFID, 1999<sub>[30]</sub>) Because of this, human capital plays a foundational role

CONSIDERING HUMAN CAPITAL IN A MULTIDIMENSIONAL ANALYSIS OF FRAGILITY @ OECD 2020

-

<sup>&</sup>lt;sup>5</sup> Certain definitions of the SLA choose to distinguish between social and 'political capital', which can describe access to wider institutions of society (DFID, 1999<sub>[30]</sub>). The definition of "social capital" presented in this paper encompasses wider institutions of society, which is why the distinction was not made. However, this does not suggest a 'downgrading' of the importance of political factors for building sustainable livelihoods.

in supporting people's lives, livelihoods and well-being (UNDP, 2017<sub>[1]</sub>). For example, human capital complements physical capital in the production process and constitutes an important input to technological innovation and long-term growth (World Bank, 2019<sub>[11]</sub>).

# Human capital is one of multiple forms of capital that hold implications for lives and livelihoods

The systems that shape fragility are complex, not mono-causal. Therefore, while human capital plays an intrinsic and valuable role, it is also important to acknowledge that it is not sufficient as a standalone resource. Indeed, each form of capital within the SLA plays a role in supporting well-being, and the resilience of people, households, and communities (Box 1.1).

#### Box 1.1. The five forms of capital in the Sustainable Livelihoods Approach

*Human capital* is a property of individuals (DFID, 1999<sub>[30]</sub>). It consists of the knowledge, skills and health that people accumulate over their lives, that improves their well-being and supports their ability to realise their potential (UNDP, 2017<sub>[1]</sub>; World Bank, 2018<sub>[2]</sub>). Aside from its intrinsic value as an asset, it is a prerequisite needed to make use of any other form of capital (DFID, 1999<sub>[30]</sub>). As such, it plays a foundational role in helping people to build sustainable livelihoods (UNDP, 2017<sub>[1]</sub>).

**Social capital** consists of "networks together with shared norms, values and understandings that facilitate co-operation within or among groups" (OECD, 2001<sub>[35]</sub>). Social capital supports and strengthens societies. Although it is rarely assigned a monetary value, people tend to value social capital greatly – and rely heavily on it as a resource for their lives and livelihoods (Haldane, 2020<sub>[36]</sub>; UNDP, 2017<sub>[1]</sub>). Social capital impacts directly on the accrual of other forms of capital by improving the efficacy of economic relationships and by granting equal access to resources and public goods.

**Natural capital** consists of naturally occurring resources (e.g. soil, water, air, etc.) which can be used to support people's well-being and livelihoods. Natural capital is extremely important for people who rely on natural resources for a living, and the ecosystem services that support general human welfare (UNDP, 2017<sub>[1]</sub>).

**Physical capital** consists of basic infrastructure and production goods, or the tools and equipment that increase productivity – such as road and transport, housing, water and sanitation, clean and affordable energy, and communication. Inadequate access to physical capital can impede education, access to medical assistance or income generation. For example, without access to services such as clean water or energy, human health deteriorates, resulting in the need for people to spend long periods carrying out unproductive activities to fulfil their needs, such as collecting water or wood for fuel (UNDP, 2017<sub>[1]</sub>).

**Financial capital** consists of the financial resources that populations access to support themselves and their families. This involves converting financial capital into other types of capital, or directly purchasing the resources necessary for survival (e.g. buying food to reduce food insecurity). Other assets cannot be obtained directly by using financial capital, such as certain kinds of well-being or knowledge.

#### It is especially important to consider the relationship between human and social capital

In addition to acknowledging the other forms of capital in the SLA, there is value to paying specific attention to the close relationship between human and social capital. Their intrinsic value plays a vital role in shaping fragility through outcomes affecting people's lives, livelihoods and well-being, and both directly impact the accrual of other forms of capital.

Human capital is integral for building social capital. Human skills, knowledge and the ability to command labour are essential in order to reap the benefits of social capital. Indeed, human capital can also help to support social cohesion, and the structures and processes for transformation that are so closely linked to social capital (Box 1.2), such as civic or community engagement, and strong and robust institutions. Indeed, higher education helps to build trust among communities by helping to instil common norms and values, and can increase civic engagement and participation (Bernard, Coulibaly and Winthrop, 2020<sub>[37]</sub>). Investing in human capital can help address social issues such as income inequality, helping to foster social cohesion and integration (Kawachi and Kennedy, 1997<sub>[38]</sub>), while a healthy and educated population can supply the skills and labour force needed to build strong and effective institutions – fostering a sense of trust between governments and their citizens (OECD, 2020<sub>[39]</sub>).

The relationship between human and social capital goes two ways. Human capital provides a foundation for the relationships comprise social capital, while social capital encompasses the relationships that shape the realisation of human capital's potential (Schuller, 2001<sub>[40]</sub>). The networks of shared norms, values and understandings (Box 1.2) that comprise social capital can foster mutual trust and reciprocity – lowering the costs of working together, and improving the efficacy of economic relationships as well as access to resources and public goods. Social capital can support education by encouraging innovation and knowledge gains while facilitating their exchange, and can strengthen systems for health by increasing community trust, perceived value, accountability and agency (Papoulidis, 2020<sub>[41]</sub>; DFID, 1999<sub>[30]</sub>; UNDP, 2017<sub>[11]</sub>). The structures and processes for transformation linked with social capital are also useful for supporting the human capital of populations. Civic engagement allows societies and groups to hold governments accountable for the provision of essential services in a way that responds to the needs of the community and the risks it faces (Schaaf, Topp and Moses, 2017<sub>[42]</sub>), through sound policy formation, implementation and quality public services that support human capital. Conversely, low levels of social cohesion, and trust among populations and towards governments can lead to, social discontent, unrest, and violence (OECD, 2020<sub>[39]</sub>), which can negatively impact human capital (Corral et al., 2020<sub>[7]</sub>).

#### Box 1.2. Social capital and fragility

As specified in Box 1.1, the OECD defines social capital as "networks together with shared norms, values and understandings that facilitate co-operation within or among groups" (OECD, 2001<sub>[35]</sub>). The bonding, bridging and linking activities that promote social capital can help foster resilience in fragile contexts (OECD, 2018<sub>[43]</sub>).<sup>6</sup> By increasing trust within and between communities, and between communities and formal institutions, social capital can promote information and asset sharing, access to funds, as well as access to formal and informal services. It can also mend divisions that have the potential to provoke conflict, and can prompt responsive action in the face of crisis (OECD, 2018<sub>[43]</sub>; Furukawa and Deng, 2019<sub>[44]</sub>), helping to mitigate risks and build resilience in fragile contexts.

Social capital is important for people because it holds a close link with structures and processes for transformation. Social capital is both a product of and a contributor to these structures and processes, whether in the form of institutions, organisations or policies and legislation, acting at multiple levels – from the household to the international, and both public and private. These structures and processes can be vital in shaping people's lives and livelihoods. They determine people's access to different forms of capital, livelihood strategies, decision makers and influencers. They also determine the terms of exchange between different kinds of capital (UNDP, 2017<sub>[1]</sub>).

Social capital can be a factor of resilience which complements the role of social protection as a traditional aid-based component, and which can serve as a supplement for the absence of other types of capital. Indeed, people often rely on the solidarity of communities, families and social networks as a means to build sustainable livelihoods. For instance, shared labour groups can compensate for limited human capital within a household (DFID, 1999[30]). Surveys of refugees in Kenya provide an example of how social capital can serve as a means of social protection for vulnerable communities, even in the presence of assistance from international or non-governmental organisations (NGOs) (Betts, Omata and Sterck, 2018[45]). When asked where they would be likely go if faced with different kinds of need, refugees in Kakuma and Nairobi cited their reliance on friends, family and community as important resources for basic needs such as money, food or material assistance. The survey also found that systems of support akin to households were developed among refugees. In these households, elders establish rules and mentor younger or more vulnerable household members, while those who fall ill are cared for by other household members. Members share daily household chores, and those approaching graduation or undertaking important exams are exempt (Betts, Omata and Sterck, 2018[45]).

Although human capital holds a central role in the SLA, both human and social capital have intrinsic value that plays a vital role in shaping fragility by impacting people's well-being, potential, and ability to build and maintain sustainable livelihoods. Both also directly impact the accrual of other forms of capital. With this said, although they have a close relationship, human and social capital differ greatly in a few key respects. Social capital is relational – it is a public good in that it is shared by a group, while human capital consists of exclusive characteristics or properties of individuals, making it a solid form of evidence in support of people-centred policies. Unlike human capital, social capital is also rarely assigned a monetary value, instead being supported in a less direct fashion through societal investments of time and effort (OECD, 2001<sub>[35]</sub>; Haldane, 2020<sub>[36]</sub>).

<sup>&</sup>lt;sup>6</sup> "Bonding" refers to increasing trust within communities, "bridging" refers to increasing trust between communities, and "linking" refers to increasing trust between communities and formal institutions (Furukawa and Deng, 2019<sub>[44]</sub>).

# What role does human capital play in shaping fragility?

#### Fragile contexts are lagging behind when it comes to human capital

Support for human capital is an investment in the future. By investing in the human capital of their populations, countries can produce benefits at the individual, local and national levels, promoting resilience and helping to maximise the potential for more prosperous lives (Flabbi and Gatti, 2018<sub>[6]</sub>). Indeed, the COVID-19 pandemic and its associated fiscal, political and social shocks, have brought the urgent need to invest in human capital into sharper focus. However, fragile contexts are lagging behind when it comes to human capital. All but one of the 47 fragile contexts measured in the World Bank's HCl fall below the worldwide average for human capital, with the Islamic Republic of Iran being the exception<sup>7</sup> (Figure 2.1). Additionally, 33 of the 37 pre-demographic dividend countries listed by the World Bank also are fragile contexts and account for 95% of the total population of pre-demographic dividend countries<sup>8</sup> (World Bank, 2018<sub>[46]</sub>). Pre-demographic dividend countries are mostly low-income countries that lag in key human development indicators. They have a high fertility level of more than four births per woman, are undergoing very rapid population growth and have young populations not yet of working age (UNESCO, 2020<sub>[47]</sub>). Investing in the human capital of these young populations will have significant implications for future outcomes in these contexts.

<sup>&</sup>lt;sup>7</sup> Of the 57 fragile contexts included in the OECD Fragility framework, 47 are listed on the World Bank's HCI due to data restrictions.

<sup>&</sup>lt;sup>8</sup> The figures are authors' calculations based on the 2020 Fragility framework and data from the *Pre-demographic Dividend* database of the World Bank (2018<sub>[46]</sub>), available at <a href="https://data.worldbank.org/region/pre-demographic-dividend?view=chart">https://data.worldbank.org/region/pre-demographic-dividend?view=chart</a>.

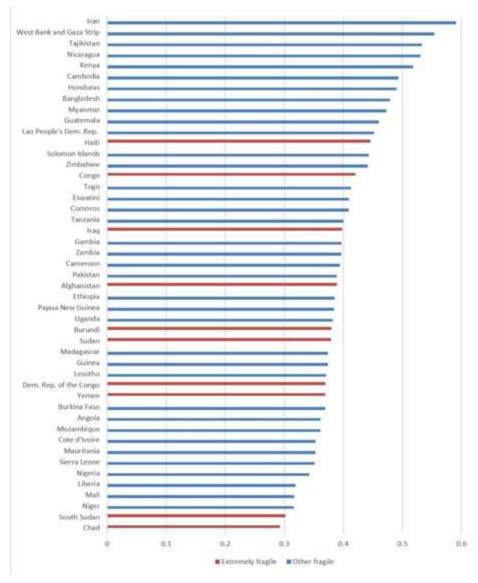


Figure 2.1. Human Capital Index scores of fragile contexts, extremely fragile and other fragile, 2017

Note: Data from the Human Capital Index was only available in 47 of 57 fragile contexts.

Source: World Bank, *Human Capital Index* (database), <a href="https://databank.worldbank.org/source/human-capital-index">https://databank.worldbank.org/source/human-capital-index</a> (World Bank, 2020[48]).

#### What is the state of human capital in fragile contexts?

#### The state of education

In fragile contexts, education systems are under stress and underfinanced in comparison to the support needed to achieve learning for all, as called for in Sustainable Development Goal (SDG) 4, and available data indicate widespread learning poverty in fragile contexts (Desai,  $2020_{[49]}$ ; Marley and Desai,  $2020_{[50]}$ ). Youth and children bear the brunt of fragility's impacts on education and employment. Access to primary and secondary education remains a challenge for millions of children and youth in fragile contexts, limiting their ability to gain the skills and knowledge they need to lead sustainable lives (Marley and Desai,  $2020_{[50]}$ ). This limited access is even more pronounced in situations of violent conflict, and among displaced populations and their host communities.

In the 43 fragile contexts for which data are available, 66.1 million youth between the ages of 15 and 24 are not in employment, education or training, and almost three-quarters, or 47.9 million people, are women (Marley and Desai, 2020<sub>[50]</sub>). All of this holds critical implications for building human capital, especially considering the large size of the youth population in fragile contexts. Indeed, lack of education and experience in fragile contexts leads to a lack of opportunities. Youth living in fragile contexts are more likely than older workers to be unemployed and underemployed due to their lack of experience and are found in disproportionate numbers working in the informal sector (UN, 2020<sub>[51]</sub>).

The COVID-19 pandemic will further exacerbate these disparities in access to education, as school closures impact attendance, domestic sources of education finance become more limited, and households no longer have the resources or income to spend on education (OECD, 2020[52]). Save the Children estimates that, globally, 12 contexts are at extreme risk of falling behind on progress toward SDG 4 due to the pandemic, 11 of which are fragile contexts (Warren and Wagner, 2020[53]; OECD, 2020[52]). The pandemic has disrupted education in 191 countries and has caused schools around the world to temporarily close (UNESCO, 2020[47]), precipitating an education emergency. In fragile contexts, 384.5 million children were still out of school across pre-primary, primary, secondary and tertiary levels as of 15 July 2020, 183 million of which were girls (OECD, 2020[52]; UNESCO, 2020[47]). It is likely that many girls will never return to school after the crisis (Albrectsen and Giannini, 2020<sub>[54]</sub>; Bandiera et al., 2020<sub>[55]</sub>). According to the 29 fragile contexts for which data are available and based on United Nations Development Programme (UNDP) estimates, the annualised effective out-of-school rate for primary education is projected to increase from 22% in 2019 to 34% in 2020, compared to global averages of 9% in 2019 and 20% in 2020 (UNDP, 2020<sub>[56]</sub>; OECD, 2020<sub>[52]</sub>). As highlighted in Chapter 1, early childhood education plays a vital role in enabling societies to build and maintain human capital for generations to come, but the effects of school closures on children can be deep and long-lasting (Andrabi, Daniels and Das, 2020<sub>[57]</sub>; Bernard, Coulibaly and Winthrop, 2020[37]). Accordingly, the implications of COVID for early childhood education in fragile contexts are of genuine concern, as they may result in lost education gains due to school closures and cutting of education budgets, especially in early childhood development.

#### The state of health

According to States of Fragility 2020, prior to the COVID-19 pandemic, none of the fragile contexts on the OECD framework were on track to meet SDG 2 on zero hunger, or SDG 3 on good health and well-being (Marley and Desai, 2020<sub>[50]</sub>). In fragile contexts, systemic gaps leave most health systems weak – lacking steady financing mechanisms, a properly trained and adequately paid workforce, well-maintained facilities and access to reliable information (OECD, 2008[58]; WHO, 2010[59]; UN, 2020[60]). In addition, health facilities and staff are often concentrated in capital or densely populated cities, quality essential drugs are frequently in short supply and numbers of hospital beds remain low, leaving vulnerable populations more at risk during health crises (OECD, 2008[58]). For rural populations, lack of geographical access to proper healthcare infrastructure can result in negative health outcomes, while in cities, high population densities, lack of running water and food shortages can lead to the rapid spread of disease (Moreira da Silva and Moorehead, 2020[61]). Health infrastructure and personnel are often targeted directly in conflict-affected settings, which also curtails healthcare capacity (Briody et al., 2018[62]). This creates negative health outcomes for populations in fragile contexts, with significant implications for building and preserving human capital, including through issues such as malnutrition, stunting, risk of exposure to infectious diseases, and mental health. Indeed, in fragile contexts, life expectancy is ten years less than in the average non-fragile, developing context (Marley and Desai, 2020[50]).

Moreover, these challenges are at risk of being exacerbated by health crises such as the COVID-19 pandemic. For example, the latest *State of Food Security and Nutrition in the World* report finds that the pandemic may increase the total number of undernourished people globally by 83 to 132 million people in 2020 (FAO, 2020<sub>[63]</sub>; OECD, 2020<sub>[52]</sub>), while the World Food Programme has warned of "multiple famines of biblical proportions" before the end of 2020 (World Food Programme, 2020<sub>[64]</sub>; Desai, 2020<sub>[49]</sub>).

Additionally, when health systems collapse, deaths from the outbreak itself could quickly be exceeded by deaths from preventable or treatable conditions, which failing health systems can no longer adequately manage (UN, 2020<sub>[60]</sub>). Evidence from previous pandemics suggests that stress on health systems results in facilities prioritising certain health services over others, with sexual and reproductive health services scaled back (World Health Organization, 2020<sub>[65]</sub>; MSF, 2020<sub>[66]</sub>). Such reprioritisation may increase the risk of maternal mortality and other adverse health outcomes for women and girls.

#### The state of social protection

Social protection programmes are needed in fragile contexts to respond to emergencies swiftly and to help populations cope with the impacts of crises – preventing significant loss of human capital gains and ensuring that the population can rebuild. However, while contexts with strong social protection systems and basic services suffer the least and recover the fastest during crises, 55% of the world's population has inadequate or no social protection to begin with (UN, 2020[60]).

Although social protection systems are in place in some fragile contexts, coverage of formal social safety nets is much lower than in non-fragile, developing contexts, with particular disparities in fee waivers, cash transfers and food and in-kind assistance (Figure 2.2). Factors contributing to this disparity include lack of financing from governments and development partners, low government capacity for provision of these services and differences in reach (Hanna and Cheah, 2020<sub>[27]</sub>). Additionally, high levels of informal employment make formal protection schemes inaccessible to a large percentage of the population (Devereux and Sabates-Wheeler, 2004<sub>[23]</sub>). This is especially true in fragile contexts, where the number of people employed informally dwarfs the formal economy (OECD, 2018<sub>[43]</sub>). This lack of social protection coverage underscores the need for an extraordinary scaling-up of effort, particularly in fragile contexts. In the absence of such investments, people in fragile contexts risk being further left behind on progress toward sustainable development and peace.

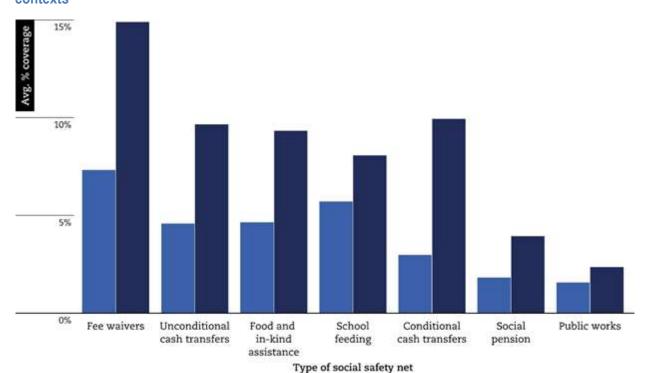


Figure 2.2. Population coverage of social safety nets by type, fragile versus non-fragile, developing contexts

• Fragile contexts • Non-fragile, developing contexts

Note: Calculations based upon the average percent coverage among all fragile contexts and non-fragile, developing contexts, using population statistics from UN DESA (2020<sub>[67]</sub>) in alignment with the year reported in World Bank (2020<sub>[68]</sub>). Year of reporting varies in the source data. Source: World Bank (2020<sub>[68]</sub>), ASPIRE: The Atlas of Social Protection Indicators of Resilience and Equity (database), <a href="https://www.worldbank.org/en/data/datatopics/aspire">https://www.worldbank.org/en/data/datatopics/aspire</a>; UN DESA (2020<sub>[67]</sub>), World Population Prospects 2019 (database), <a href="https://population.un.org/wpp/">https://population.un.org/wpp/</a>.

Support for social protection systems will also be crucial for helping people in fragile contexts cope with the shocks of COVID-19 (Rutkowski, 2020<sub>[69]</sub>), as the effects of the pandemic begin to impact coping capacities that people rely upon. For example, migrant mobility and remittances are under severe stress as a result of COVID-19 (Sayeh and Chami, 2020<sub>[70]</sub>), while closed schools may also lead to lack of access to critical services that people rely upon for support. Schools are often a powerful vehicle for facilitating social protection for families that need it the most, encouraging attendance, providing social stability and preventing widening inequality (Bernard, Coulibaly and Winthrop, 2020<sub>[37]</sub>).

Governments in fragile contexts have begun to undertake efforts to address the pandemic using social protection measures. As of 10 July 2020, fragile contexts had implemented 113 social assistance programmes, 15 social insurance programmes, and 8 labour market measures in response to COVID-19 (Gentilini et al., 2020<sub>[71]</sub>). For example, in fragile contexts such as Bangladesh, Nigeria, and Republic of the Congo, governments have introduced or expanded cash-based assistance to alleviate the economic consequences of the pandemic, especially for the poor (Desai, 2020<sub>[49]</sub>). In Burkina Faso, efforts are currently underway to expand the social protection system to those who typically do not qualify for cash transfers, but who are on the brink of falling into poverty due to COVID-19. This includes vendors, small-scale farmers, traders, and others whose livelihoods depend on the informal economy, and who have been lockdowns and border closures (Grun, Semlali and Vandeninden, 2020<sub>[72]</sub>). Still, few governments or households in fragile contexts are able to introduce the kinds of large-scale economic stimulus and social

safety net responses to the crisis that were initiated in Europe (UN, 2020<sub>[60]</sub>). Indeed, far less – about only one-fifth – is spent on social safety nets in fragile contexts than in other developing contexts (World Bank, 2020<sub>[68]</sub>; OECD, 2020<sub>[52]</sub>).

#### What is being done to support human capital in fragile contexts?

In some fragile contexts, social protection is playing an increasingly significant role in supporting human capital

Social protection interventions have the potential to reduce poverty in fragile and conflict-affected contexts if they are well-implemented (Bedoya Arguelles et al., 2019<sub>[73]</sub>). Although community-based social protection such as that described in Chapter 1 can serve as an important form of support for human capital, government-led social protection schemes remain important for supporting to the needs of the most vulnerable and protecting populations against shocks and crises. Indeed, some national governments in fragile contexts have taken some measures to support human capital through investment in social protection, with varying levels of success. In sub-Saharan Africa, the past two decades have seen a significant social protection expansion, with more than 45 countries have established social safety nets programs (Grun, Semlali and Vandeninden, 2020<sub>[72]</sub>).

A well-noted example is Ethiopia's social protection system, which sits at the heart of the country's recent economic and social success (Endale, Alexander Pick and Woldehanna, 2019<sub>[74]</sub>). Ethiopia's social protection system is one of the largest in Africa, with strong support from international development partners (Endale, Alexander Pick and Woldehanna, 2019<sub>[74]</sub>). It includes programmes such as the Productive Safety Net Programme (PSNP), a safety net to support rural populations which reaches 8 million chronically food insecure Ethiopians in normal times (a number that has doubled in times of crisis such as drought). The PSNP transfers food, cash or both based on need and season either through direct support or public work activities (Khodr, 2020<sub>[75]</sub>; Diriba, Mohammed and Hussein, 2017<sub>[76]</sub>). The programme plays a significant role in poverty reduction, lifting 1.5 million people out of poverty, and contributes to the delivery of additional benefits including better nutrition, enhanced agricultural productivity and better access to basic services (OECD/PSI, 2020<sub>[777]</sub>). The urban equivalent of the PSNP was launched in 2016, and today covers some 604 000 beneficiaries across 11 cities including Addis Ababa.

Despite the poor track records of interventions in addressing poverty in conflict-affected contexts, these contexts represent an important target group for reducing global poverty (Brune et al.,  $2020_{[78]}$ ), and preserving human capital during times of crises. Indeed, social protection programmes can be feasible, though difficult, even in settings of conflict and social unrest. Graduation programmes are programmes that consist of short-term relief with a sizable transfer of productive physical capital, coupled with training and ongoing support over the course of one or two years (Chowdhury, Collins and Kaivan,  $2016_{[79]}$ ; Brune et al.,  $2020_{[78]}$ ). In non-conflict contexts, this model has been found to generate positive impacts that persisted after two or three years, alleviating the constraints that prevent extremely poor households from supporting themselves (Brune et al.,  $2020_{[78]}$ ).

Studies on the impacts of such programmes have also been conducted in conflict-affected contexts such as Afghanistan, South Sudan and Yemen, with moderate to positive results. A recent study done by the World Bank's Development Impact Evaluation Group found that similar programmes in Afghanistan can significantly impact consumption, assets, psychological well-being, total time spent working, financial inclusion and women's empowerment, along with children's health and education (Bedoya Arguelles et al., 2019<sub>[73]</sub>). In South Sudan, a study examining the first two years of a graduation pilot, which began in 2013 and was conducted by the development organisation BRAC, found that participants in the programme were less likely than a control group to claim that they were unable to invest in business due to the conflict that started in 2014, and had 16% higher consumption after six months (Chowdhury, Collins and Kaivan, 2016<sub>[79]</sub>). In Yemen, a study done through the Center for Global Development on a programme

implemented in 2010 by the Social Fund for Development (SFD) and the Social Welfare Fund (SWF) discovered modest yet positive results after four years in terms of asset accumulation and savings behaviour, although the assets were substantially lower than the amount the household originally received. A reasonable interpretation of these results focuses on the asset increase as evidence that, despite the political instability, the programme was able to make important and long-lasting impacts on households, albeit at a high cost (Brune et al., 2020<sub>[78]</sub>).

Despite success stories, there remains a significant gap in social protection coverage in fragile contexts, as discussed above. In Ethiopia, for example, there is a gap in the resources needed to cater to the growing number of PSNP recipients (OECD/PSI, 2020<sub>[77]</sub>). Indeed, although the programme covered 8 million individuals in 2016, this represented less than half of the country's poor population, indicating significant unmet demand for social assistance in the absence of other large-scale transfer schemes (Endale, Alexander Pick and Woldehanna, 2019<sub>[74]</sub>). Additionally, social protection programmes are even more necessary during periods of social upheaval, but are also harder to implement and evaluate successfully (Brune et al., 2020<sub>[78]</sub>). For example, the results of the Yemen study, discussed above, were unable to yield precise estimates on per-capita consumption or household income, or discern that borrowing or food security increased as a result of the programme. Additionally, there is some external evidence for the potential for asset transfers to increase rather than reduce vulnerability to shocks in unstable contexts such as Yemen (Brune et al., 2020<sub>[78]</sub>). Indeed, further research is needed to better understand how such programmes can help households survive system-wide crises, especially in light of COVID-19.

Development partners can help support human capital in fragile contexts.

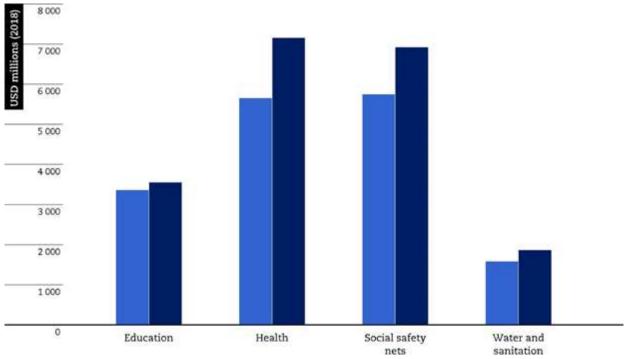
Assistance from development partners can support the capacity of governments in fragile contexts to invest in the well-being and potential of their populations and provide necessary public services, including health, education, and social protection. When it comes to building and maintaining human capital, national and local ownership is important for self-reliance and for fostering trust and a sense of legitimacy between governments and their populations.

Reliable funding for health, education and social protection is important both in development and humanitarian settings. Indeed, support is needed in fragile contexts both to build human capital and to prevent its loss. Investing in health, education and social protection can have the immediate effect of saving lives and protecting the most vulnerable, while it can also yield substantial benefits over the long term by promoting growth and reinforcing coping capacities against future crises.

The consequences of the COVID-19 pandemic in fragile contexts will be felt in the health sector over the short term, while there could also be potentially significant socio-economic implications. A response that takes human capital into account will help address the multidimensional effects of crises, prioritising the funding needs of sectors such as health, education, social protection and water and sanitation. From 2010 to 2018, DAC members increased their bilateral assistance to each of these priority sectors in fragile contexts, both in volume and as a proportion of total ODA (Figure 2.3). Indeed, from 2010-2018, DAC bilateral official development assistance (ODA) to health and social protection increased by 26% and 16%, respectively (Desai, 2020<sub>[49]</sub>). It is also notable that in response to the pandemic , DAC members have prioritised health and social safety nets, while the United Nations (UN) is prioritising health, social protection, social cohesion and community resilience (UN, 2020<sub>[60]</sub>; OECD, 2020<sub>[80]</sub>).

In addition to prioritising health and social protection in response to COVID-19, support for education will also be crucial. DAC members' education ODA to fragile contexts in 2016, 2017 and 2018 were, on average, the largest ever. In 2018, DAC members provided 8% of their total bilateral ODA to fragile contexts (USD 3.6 billion) which was a historical peak (Desai, 2020<sub>[49]</sub>). Striving to protect this progress will be important for supporting fragile contexts in response to the COVID-19 pandemic. Indeed, without the right attention, education budgets will likely take a hit, and will not rise in absolute terms at the rate needed to reach SDG 4 (quality education) (Carvalho and and Hares, 2020<sub>[81]</sub>).

Figure 2.3. DAC bilateral ODA to health, education, social safety nets, and water and sanitation in fragile contexts, 2010-18





Note: The category of social safety nets includes the following purpose codes from the OECD's Creditor Reporting System: Social protection (16010), Basic nutrition (12240), Food assistance (52010), Emergency food assistance (72040), Employment creation (16020), Informal/semi-formal financial intermediaries (24040), Social mitigation of HIV/AIDS (16064), Agricultural inputs (31150); and School feeding (11250), based on a schema introduced in Development Initiatives (Development Initiatives, 2015<sub>[82]</sub>), with the addition of purpose code 11250. Source: OECD 2020, "Detailed aid statistics: ODA Official development assistance: disbursements", *OECD International Development Statistics* (database), <a href="https://doi.org/10.1787/data-00069-en">https://doi.org/10.1787/data-00069-en</a> (OECD, 2020<sub>[83]</sub>).

# Human capital is an essential building block of sustainable development in fragile contexts that is vital to leaving no one behind

Many who live in fragile contexts face chronic poverty, economic vulnerability and social marginalisation. Depending on the context, these categories can overlap as a result of the composite nature of vulnerability (Devereux and Sabates-Wheeler, 2004<sub>[23]</sub>). Access to health, education and social protections are important dimensions of well-being. Their absence can have devastating results for the most vulnerable in times of crisis and make it difficult for them to rebuild their lives afterward. Multidimensional deprivation can have a trapping effect on individuals and households, in large part through impacts on human capital; conversely, human capital investments can yield long-term benefits and play a vital role in reducing poverty (Corral et al., 2020<sub>[7]</sub>). Indeed, negative outcomes in education and health are far worse for vulnerable populations, reinforcing intergenerational cycles of low human capital, poverty, violence and persistent inequality that are difficult to escape. Like for any crisis, the COVID-19 pandemic is expected to have long-lasting effects on people in fragile contexts, with significant intergenerational implications (UN, 2020<sub>[60]</sub>). As the world pivots toward the "decade of action", and in the wake of the pandemic, bold steps must be taken to reorient the international community towards achieving the SDGs in fragile contexts (UN, 2020<sub>[60]</sub>).

#### Human capital and poverty

Projections of extreme poverty in fragile contexts are predicted to have a dramatic impact on human capital (Box 2.1). Indeed, as discussed in Chapter 1, poverty affects human capital across a range of issues such education and cognitive development, malnutrition, infant and maternal mortality. Conversely, returns on investment in human capital in the form of increased earnings can help lift populations out of poverty (World Bank, 2019[11]).

#### Box 2.1. Poverty in fragile contexts

Poverty and income disparities are concentrated in fragile contexts. Prior to the COVID-19 pandemic, only 8 of the 48 fragile contexts for which data are available were on track to meet SDG 1 on ending poverty. In 2020, fragile contexts are home to 460 million people living in extreme poverty – or 76.5% of the worldwide total (Marley and Desai,  $2020_{[50]}$ ). The World Bank now estimates that due to the pandemic, extreme poverty will increase by 60 million people – the first global increase in extreme poverty in more than two decades (Lakner et al.,  $2020_{[84]}$ ). Fragile contexts will account for 43% of this global projected increase, with 26 million more people in fragile contexts falling into extreme poverty as a result of the pandemic (Marley and Desai,  $2020_{[50]}$ ). This increase will have a particularly large impact on young populations. By the end of 2020, the number of children living in monetary poor households will increase by 106 million – a third of which (36 million) will be living in fragile contexts (Desai and Forsberg,  $2020_{[85]}$ ). Poverty is concentrated among women and children, (Christensen,  $2019_{[86]}$ ), particularly in fragile contexts (Marley and Desai,  $2020_{[50]}$ ), holding detrimental implications for building and preserving human capital. Indeed, more than half of the people living in extreme poverty are estimated to be children (UNICEF,  $2016_{[87]}$ ).

Households with low levels of income are less likely to be able to bear the financial burden of investing in their own human capital - both in terms of the explicit and opportunity costs of health and education. Currently, such investments are underprovided, especially for poor, disadvantaged children, who would benefit from them the most. According to UNICEF, the richest children are seven times more likely to attend early childhood education programmes than the poorest (UNICEF, 2019[20]). Children from low-income families have access to fewer learning opportunities at critical moments in their development, while young people from poorer families must begin work at an earlier age in order to support themselves and their families. Indeed, only half of all children aged 3 to 6 have access to pre-primary education globally, and in low-income countries this share drops to one-fifth (World Bank, 2019[11]). The poor and economically vulnerable are also less likely to have the resources they need for access to proper nutrition, leading to negative health outcomes such as stunting and wasting, with consequent impacts on cognitive development and a lifetime of potential. Indeed, poverty and inequality hold implications for malnutrition. In 2019, for instance, 64% of all stunted children and 75% of all wasted children were living in lower middleincome countries (UNICEF/WHO/World Bank Group, 2020[88]; Marley and Desai, 2020[50]). Such persistent inequality often results low intergenerational mobility, with children from poor households being unable to escape the family circumstances into which they were born (Bhalotra and Rawlings, 2013[19]).

#### Human capital and conflict

Conflict and violence have detrimental impacts on human capital – and violence, armed conflict and forced displacement are concentrated in fragile contexts. In 2019, 22 of the 31 contexts affected by armed conflict were fragile, accounting for 65% of the population of all 57 fragile contexts (Desai and Forsberg, 2020<sub>[85]</sub>). While 18.4 million refugees originated from fragile contexts in 2019, the majority of refugees today are also being hosted in fragile contexts – as three of the top five developing contexts that host the greatest number of refugees are also fragile (Marley and Desai, 2020<sub>[50]</sub>). Conflict can have negative impacts for systems

that support human capital particularly through access to healthcare and education infrastructure. For example, health infrastructure and personnel are often and increasingly directly targeted in conflict-affected settings (Briody et al., 2018<sub>[62]</sub>). In Syria and Yemen, there have been widespread attacks on healthcare facilities and personnel – with up to 465 reported attacks on healthcare facilities in Syria over a seven-year period, and up to 93 attacks on hospitals in Yemen in a period from March 2015 to December 2016 (Briody et al., 2018<sub>[62]</sub>). In addition for the potential for reduced access to infrastructure, conflict can have negative impacts on the mental health of populations (Currie and Stabile, 2009<sub>[18]</sub>). While most of those exposed to emergencies suffer some form of psychological distress, accumulated evidence shows that 15-20% of crisis-affected populations develop mild-to moderate mental disorders, while, 3-4% develop severe mental disorders that affect their ability to function and survive (Marquez and Walker, 2016<sub>[89]</sub>). For children especially, this trauma and stress can impair their brain development, skill enhancement (World Bank, 2019<sub>[11]</sub>), and overall health and well-being.

In addition to the necessity of investing in building human capital in order to help lift populations out of poverty, it is also important to invest in maintaining human capital - or preventing its loss. Indeed, conflict, violence and crises can cause irreversible damage to societies: once human capital is impacted by these, it is very difficult to rebuild (Corral et al., 2020[7]). In addition to poverty, the implications of human capital for intergenerational mobility can be observed through the impacts of conflict on the human capital of populations. Indeed, the higher the number of conflict-related deaths to which individuals are exposed before or during their primary school age, the lower the probability that they will attain a higher educational level than both their parents. If education is taken as a rough proxy for socio-economic status, this means that individuals' rates of intergenerational mobility decline as the intensity of their childhood exposure to conflict rises (Corral et al., 2020[7]). Additionally, individuals in contexts with numerous conflict-related deaths are more likely to have their socio-economic status determined by that of their parents, while those who have not experienced conflict are more likely to experience outcomes independent of their parents (Corral et al., 2020<sub>[7]</sub>). This is significant for fragile contexts. In 2019, 96% of battle-related deaths from armed conflict occurred in fragile contexts, while the average probability of violent conflict was almost three times higher than in non-fragile contexts and twice as high as the global average (Halkia et al., 2019<sub>[90]</sub>; Marley and Desai, 2020[50]).

Akresh et. al conducted an investigation of the impacts of the Nigerian civil war of 1967–70 on the levels of health and education of women exposed to the conflict during their formative years, as well as their children. The study found that those directly exposed to the conflict experienced negative impacts on their human capital, including reduced stature in adulthood, increased likelihood of being overweight and lower educational attainment (Corral et al., 2020<sub>[7]</sub>; Akresh et al., 2012<sub>[91]</sub>). The study also found that children of women exposed to the war during their adolescence had higher neonatal, infant and child mortality rates, are more likely to be stunted, and also more likely to be underweight (Corral et al., 2020<sub>[7]</sub>; Akresh et al., 2012<sub>[91]</sub>).

#### Human capital and gender

There is documented evidence of a gender gap in human capital outcomes. HCI scores are slightly higher for girls than for boys in most contexts for which data are available, although evidence varies across contexts (World Bank, 2020<sub>[92]</sub>). In 23 of the 36 fragile contexts with HCI scores disaggregated by gender, girls have higher scores than boys (Figure 2.4). However, it is important to note that the HCI does not capture the unique challenges girls continue to face in accumulating human capital, including child marriage, early childbearing and gender-based violence (Avitabile et al., 2020<sub>[93]</sub>). These challenges will certainly be impacted by the COVID-19 pandemic. Women also continue to face barriers in converting human capital into economic opportunities (Avitabile et al., 2020<sub>[93]</sub>). Addressing these barriers to women's

<sup>&</sup>lt;sup>9</sup> The World Bank provides disaggregation for 126 out of the 157 countries analysed by the HCI (World Bank, 2020<sub>[92]</sub>)

empowerment will be important for harnessing the potential benefits of human capital, while giving women and girls the opportunity to make decisions about their own lives.

Iran West Bank and Gaza Strip Tajikistan Nicaragua Honduras Bangladesh Myanmar Guatemala Lao People's Dem. Rep. Solomon Islands Togo Comoros Tanzania Cameroon Pakistan Afghanistan Ethiopia Papua New Guinea Burund Madagascar Guinea Dem. Rep. of the Congo Burkina Faso Angola Mauritania Côte d'Ivoire Sierra Leone Nigeria Liberia Mali Niger Chad \* Human capital in fragile contexts, girls and boys, 2017 0.5 0.6 0.3 0.4

Figure 2.4. Human Capital Index scores of fragile contexts, by gender, 2017

Note: Gender-disaggregated data from the Human Capital Index was only available in 36 of 57 fragile contexts.

◆ Girls ● Boys — Other fragile contexts — Extremely fragile contexts

Sources: World Bank 2020, *Human Capital Index, Female* (database), <a href="https://data.worldbank.org/indicator/HD.HCI.OVRL.FE">https://data.worldbank.org/indicator/HD.HCI.OVRL.FE</a> (World Bank, 2020<sub>[94]</sub>); World Bank 2020, Human Capital Index, Male (database), <a href="https://data.worldbank.org/indicator/HD.HCI.OVRL.MA">https://data.worldbank.org/indicator/HD.HCI.OVRL.MA</a> (World Bank, 2020<sub>[95]</sub>).

Women in particular play an important role in building human capital. Maternal health and education are critical influences on early childhood development and lay the foundation for a child's future success (Bhalotra and Rawlings, 2013<sub>[19]</sub>; World Bank, 2019<sub>[11]</sub>). In fragile contexts, the maternal mortality rate is four times higher than in non-fragile contexts in 2017 (Marley and Desai, 2020<sub>[50]</sub>). This disparity shows the importance of investment in women's health, as maternal mortality rates are an indication of women's access to high-quality healthcare and their overall social and economic status in a country or context (Marley and Desai, 2020<sub>[50]</sub>). As such, maternal mortality rates have major implications for human capital.

The issue of maternal health may be even further exacerbated as COVID-19 places pressure on health systems in fragile contexts. Indeed, evidence from the Ebola epidemic suggests that when faced with budgetary pressures and the need to prioritise certain health services over others, governments are likely to scale back sexual health and reproductive services (MSF, 2020[66]). This can increase the risk of maternal mortality, and negative outcomes for children. Indeed, as highlighted in Chapter 1, stunting in mothers can impact health and education outcomes for their children, including through increased risk of infant mortality and stunting in children (Bhalotra and Rawlings, 2013[19]; Flavio and Heckman, 2007[96]).

Gender inequality and marginalisation can also impact human capital and livelihood outcomes for women and girls through education. As a coping mechanism, girls are the first to leave school in the event of economic shocks, and are less likely to return if they leave. For example, during the Ebola epidemic, many drop-outs were caused by increases in domestic and caring responsibilities, while as primary breadwinners perished, many families chose to marry their daughters off as a form of protection. In Sierra Leone, adolescent pregnancy increased by 65% in some communities, preventing girls from returning to the classroom after school reopened. Being outside of the protective environment of schools also increased girls' vulnerability to physical and sexual violence (Smith, 2020<sub>[97]</sub>; Bandiera et al., 2020<sub>[55]</sub>; Albrectsen and Giannini, 2020<sub>[54]</sub>). Because of this, investment in women's education crucial as a form of crisis response. In fragile contexts, 384.5 million children across all levels of education were still out of school due to the impact of COVID-19 as of 15 July 2020. 183 million of these children were girls, and 107.5 million of which were primary-age (UNESCO, 2020<sub>[47]</sub>; OECD, 2020<sub>[52]</sub>). That said, as highlighted in Chapter 1, the returns on investment for education of women and girls are higher on average (by about 2 percentage points) than for males, making women's education a good investment and a development priority (World Bank, 2019<sub>[11]</sub>; Psacharopoulos and Patrinos, 2018<sub>[9]</sub>).

In terms of social protection, women tend to be overrepresented in the informal economy and in most vulnerable types of employment in developing countries (ILO, 2018<sub>[98]</sub>). They also undertake most of the unpaid care and domestic work, making it more difficult for them to access formal social protection and economic opportunities. Women who are not entitled to adequate income security during the final stages of pregnancy and after childbirth, especially those working in the informal economy, can expose themselves and their children to significant health risks (OECD, 2019<sub>[99]</sub>). However, women in fragile and conflict-affected contexts also constitute important financial assets, helping families to build human capital. They are often prominent breadwinners, both in rural and urban contexts (e.g. markets are often managed by women), and many informal community-based social protection networks are managed by women (Devereux and Sabates-Wheeler, 2004<sub>[23]</sub>).

# Human capital is multidimensional – it affects, and is affected by, all five dimensions of fragility

The relationship between human capital and fragility can be observed across a wide spectrum of issues encompassing the economic, environmental, political, societal and security dimensions of fragility – affecting people, communities and societies. And although human capital is not sufficient as a standalone resource to address fragility, it does play a part. Human capital can help manage risk and build resilience in fragile contexts through fostering economic growth, promoting strong institutions, and contributing to

more peaceful and inclusive societies. Fragility can also negatively impact human capital through the shocks and stresses associated with vulnerability, health risks, weak institutions and conflict.

This section discusses the links between human capital and fragility. Indeed, the multidimensional nature of the challenges posed by COVID-19 in fragile contexts represents a clear example of these linkages. However this analysis neither intends to provide a comprehensive explanation of all the links between human capital and fragility, nor represents an attempt to assert human capital as a shortcut or simple "solution." Instead, it is an introductory assessment – an exploration of the different ways in which human capital may interact with the complex systems that shape fragility, and how its benefits can resonate at different levels and across dimensions. It aims to highlight how people's lives, livelihoods and well-being are important for understanding fragility as a whole. Indeed, fragility is messy and complex, and the movement from fragility to resilience is neither linear nor guaranteed. Certain nuances of this analysis will require further exploration, which can be undertaken as part of the process for adding a human capital dimension to the OECD Fragility Framework in 2022.

#### Economic productivity and growth

The economic dimension of the OECD Fragility framework "measures the (in)ability of individuals and households to afford safe and resilient livelihood conditions and well-being, and combines indicators of development and deprivation, inequality and aid dependency" (OECD, 2020<sub>[39]</sub>). The Fragility Framework notes that a strongly growing economy is less likely to experience economic tensions leading to violence, although high rates of economic growth that result in increased economic inequality tend to exacerbate underlying tensions and may lead to an increased likelihood of conflict over the distribution of resources. Additionally, economies that go through periods of negative growth and growth shocks have an increased likelihood of conflict (OECD, 2020<sub>[39]</sub>).

Assessing a population's level of human capital is useful because it provides measurable evidence for the return on investment in people. One well-known manifestation of this return is the positive correlation between increased human capital and earnings, making human capital a useful measure of the impact of a population's health and education on a context's economic growth (World Bank, 2018<sub>[2]</sub>; Botev et al., 2019<sub>[4]</sub>). Investment rates in human capital are highly correlated with income per capita, providing returns through increased productivity, and therefor increased earnings and better employment opportunities, while producing a more skilled and educated workforce available to increase a country's overall income (Box 2.2), while the lower labour input of workers as a result of health and education deficiencies is an important contributor to the overall poverty of many contexts (Collin and Weil, 2020<sub>[31]</sub>). The gaps in rate of investment in human capital among contexts are large – as high as a factor of three between the human capital of new workers in contexts that invest a lot relative to those that invest the least (Collin and Weil, 2020<sub>[31]</sub>). These observations demonstrate why investing in human capital might represent an attractive policy for increasing income and reducing poverty and inequality, both at the individual and context levels (Collin and Weil, 2020<sub>[31]</sub>).

Low economic growth and high levels of socio-economic vulnerability can also impact human capital. As highlighted earlier in this chapter, people who cannot afford to invest in their own human capital are less able to cope with shocks such as natural disasters, conflict or economic collapse. This places them at further risk for loss of human capital, and impairs their ability to invest in their own human capital or that of their families.

#### Box 2.2. The effect of increasing human capital investment on economic growth and poverty

A simulation exercise performed by Brown University's Orlando Bravo Center compared the potential income and poverty outcomes of two scenarios: one in which each country were to experience a rate of growth in human capital investment typical of the levels observed between 2005 and 2015, versus one in which countries would increase investment in human capital at a rate corresponding to the 75th percentile of levels observed in the data. The simulation found that the second scenario produced better results than the first – with a 12% increase in world GDP per capita and a 1.4% decrease in global poverty. The gains were concentrated in poor countries, where at nearly 25%, GDP per capita was 13% higher than the global average.

However, these benefits take time to manifest. It takes a long time to produce new workers, and for existing workers who may have been subject to lower human capital investments to cycle out of the workforce. The model also found that physical capital delivers results much more quickly (a country can build more machines and infrastructure at a faster pace than it can create better workers). Despite this, over the long term, investing in people is relatively cheap in comparison, which helps to overcome the timing advantage of investing in physical capital.

The study emphasises that although investing in human capital provides instrumental value in the form of increased income (both for a country as a whole and for people), it is worth remembering that human capital investments also provide returns in other dimensions. For example, more and better education allows individuals to lead more fully actualised lives and to participate more actively in their societies, while better health allows people to enjoy more and better years of life. Taking these benefits into account would further strengthen the case for raising human capital investment.

Source: Collin, M. and D. Weil (2020[31]), "The Effect of Increasing Human Capital Investment on Economic Growth and Poverty: A Simulation Exercise", Journal of Human Capital, Vol. 14/1, <a href="https://www.journals.uchicago.edu/doi/pdf/10.1086/708195">https://www.journals.uchicago.edu/doi/pdf/10.1086/708195</a>.

#### Strong institutions

The links between human capital and strong institutions can be reflected in the economic, environmental and security dimensions of fragility through indicators such as "regulatory quality" and "government effectiveness" (OECD, 2020<sub>[39]</sub>). Human capital can help build strong and resilient institutions that are capable of addressing certain issues of relevance to fragility. For example, technical expertise and an appropriate labour force can support government capacity, helping to foster the formulation and implementation of sound and effective policies and regulations. These include policies that promote private sector development, allowing economic shocks to be more easily contained (OECD, 2020<sub>[39]</sub>; Dorsch, Maarek and Dunz, 2015<sub>[100]</sub>). These also include quality public services such as health and education, social safety nets, and clean water and sanitation. Additionally, more competent and effective governments can improve public perceptions and increase credibility. Indeed, the quality of policies and public services can demonstrate a government's commitment to policies that support the well-being of its population. (OECD, 2020<sub>[39]</sub>).

For example, in the borderlands region between South Sudan and Kenya, conflict has resulted in overall lower levels of human capital. In Kapoeta, South Sudan, this decrease in human capital has reduced the labour force qualified to serve in positions of local governance or even in district offices, which then widens the gap between formal and informal authorities and results in discriminatory government policies towards and neglect of peripheral and pastoral regions (Bushby and Stites, 2020[101]).

Institutions play an important role in setting up the path of human capital accumulation. Indeed, levels of expertise and government effectiveness can also have implications for building and preserving human

capital among populations in fragile contexts. As demonstrated in previous sections, governments can be the source of well-functioning systems that support human capital and increase the rates of return on education (Dias and Tebaldi, 2012<sub>[102]</sub>; Adams-Kane and Lim, 2014<sub>[103]</sub>), and health, through sound policy formation, implementation and quality public services. Conversely, according to the OECD Fragility Framework, perceived ineffectiveness can lead to low levels of trust and satisfaction, social discontent, political protest and ultimately even political violence (OECD, 2020<sub>[39]</sub>). This, which, as discussed earlier in the chapter, can also hold negative implications for human capital (Corral et al., 2020<sub>[7]</sub>).

#### Inclusive and peaceful societies

The links between human capital and peaceful and inclusive societies can be reflected in the societal, environmental, political and security dimensions of fragility through indicators such as "core civil society index", "horizontal inequality", "gender inequality" and "violent conflict." Fragility can be influenced in part by a lack of social cohesion that leads to the erosion of intergroup trust and an increased risk of conflict (OECD, 2020<sub>[39]</sub>). Causes of violent conflict could include social and economic exclusion, inequality, climate change, lack of transparency and accountability, and breakdowns in justice and the rule of law (Bosquet, 2020<sub>[104]</sub>). In conflict-affected contexts, investment in human capital can help support medium-to-long-term development responses that aim to address the root causes that drive conflict before they turn into full-blown crises.

As discussed throughout this paper, investing in human capital can support efforts to combat poverty, socioeconomic inequality and marginalisation – empowering women and girls, and supporting social cohesion (Kawachi and Kennedy, 1997<sub>[38]</sub>). Many post-conflict development programmes now include a component that focuses on rebuilding social cohesion in order to reduce the likelihood of relapse into conflict (OECD, 2020<sub>[39]</sub>), while in situations of protracted conflict, preserving human capital and strengthening local institutions are important investments to support populations. This can be done through building social safety nets while investing in health, education, and clean water and sanitation (Bosquet, 2020<sub>[104]</sub>).

Investing in human capital can also help to develop more peaceful and inclusive societies by supporting efforts to address gender inequality. As outlined earlier in this chapter, investing in the human capital of women and girls can help empower them to achieve their own life goals, aspirations, and the best possible outcomes for themselves and for their families. Indeed, research has found that countries characterised by gender inequality are more likely to be involved in interstate disputes and more likely to rely on violence to settle those disputes. In addition, it has been found that high levels of gender inequality may lead to a greater propensity for intrastate conflict (Caprioli, 2005[105]; OECD, 2020[39]). Conversely, countries and contexts with higher rates of women's participation in the labour force are less likely to experience conflict, and women's active participation in peace processes contributes effective implementation and sustainability of a resulting peace agreement (Marley and Desai, 2020[50]).

Social capital reduces the risk of social instability spilling over into social violence and conflict, by allowing groups to overcome differences and resolve problems (Lederman, Daniel and Menéndez, 2002<sub>[106]</sub>; OECD, 2020<sub>[39]</sub>). As noted in Chapter 1, investment in education can play a role in fostering social cohesion by helping to build trust and instil common norms (World Bank, 2019<sub>[11]</sub>). Additionally, higher levels of education are known to encourage higher levels of political engagement, which can help support a robust civil society, which is a coping capacity in the face of fragility (Bernard, Coulibaly and Winthrop, 2020<sub>[37]</sub>; OECD, 2020<sub>[39]</sub>).

Fragility as a result of violent conflict and horizontal and gender inequality can also have an impact on human capital. Indeed, as this chapter previously highlights, under-investment in health, education and social protections to poor and/or marginalised communities can reinforce cycles of low human capital, poverty, and persistent inequality that are difficult to escape, while conflict and violence can also have negative effects on human capital, making it difficult to rebuild. Indeed, in fragile contexts, efforts to address

group-based social and economic exclusion are often most important for maintaining social cohesion and stability in the long term (Marley and Desai, 2020<sub>[50]</sub>).

#### Investment in human capital is not an end-all solution to fragility

Human capital, however, is but one component of a complex system of risks and coping capacities, and its impacts are not always net positive. Fragility is messy and complex, and the movement from fragility to resilience is neither linear nor guaranteed. Although investment in human capital can help to build resilience, building resilience does not prevent risks from materialising. Indeed, some contexts on the OECD Fragility Framework – such as the Islamic Republic of Iran – are more fragile than others, but have higher HCI scores. There are also contexts that are "extremely fragile" which score more highly on the HCI than "other fragile" contexts (Figure 2.1).

Indeed, it is important to maintain a nuanced view of the links between human capital and fragility – avoiding simplifications and giving in to easy shortcuts. Not all education systems are geared toward fostering acceptance and inclusion, and despite high levels of human capital, inequalities and marginalisation may persist.

Although human capital can support formal institutions by supplying labour, knowledge and technical expertise, they are not the only elements implicated in building effective institutions. There are other factors at play, such as social capital – which supports the deployment of this knowledge and expertise (Schuller, 2001<sub>[40]</sub>). Additionally, levels of expertise in institutions do not help to mitigate corruption by default. A civil service that is not independent from political pressures nor committed to formulating and implementing quality policy will likely prove ineffective for the general population, even if it holds high levels of knowledge and expertise. This can also affect public perception and lead to dissatisfaction among citizens.

Although investing in people is at the core of development policy in fragile contexts, the effect of the state on fragility must not be ignored, and it should be highlighted that an increase in human capital also does not always lead to a decrease in violence. When it comes to education can fostering social cohesion through fostering shared norms and mutual trust, for example – but not all education systems are built upon inclusivity and acceptance. Indeed, when it comes to building social capital, bonding without bridging can strengthen divides between communities, deepening 'us vs. them mentalities and increasing risk of intercommunal conflict (Furukawa and Deng, 2019[44]).

Depending on the context, authoritarianism, corruption and government ineffectiveness combined with an increase in education and political engagement among populations, can expose certain aspects of fragility leading to instability, unrest and political violence. For example, in contexts where there are high levels of government corruption, ineffectiveness, or political repression, educated populations that face unemployment and economic decline can become dissatisfied, with increased civic engagement against oppressive regimes leading to violence perpetuated by those regimes against their populations. This is not to imply that populations should not be educated. The root causes of such instability are authoritarianism, corruption and repression, and in cases such as these, conflict – and possibly violence – become part of the democratic process.

Although human capital can hold key benefits, it has nuanced effects and implications across all dimensions of fragility that should be further explored. Indeed, as noted earlier, human capital is not sufficient as a standalone resource to combat fragility, but does play a part by interacting with the systems that shape fragility in ways that either exacerbate risk or promote resilience. Linking these dimensions of analysis, and acknowledging human capital's unique and important role, are therefore critical to understanding and addressing fragility. The next section elaborates further on why human capital should be considered as part of the OECD Fragility Framework.

# Why should human capital be considered within a multidimensional analysis of fragility?

#### Strengthening human capital can help develop more resilient societies

Building and protecting human capital can mitigate risk and promote resilience in fragile contexts by helping people to build sustainable livelihoods. As discussed throughout this paper, investment in human capital helps people to build sustainable livelihoods by providing them with the tools they need to be resilient: to cope with and recover from stresses and shocks while maintaining or improving their capabilities and assets in the present and the future (OECD, 2014[29]). Indeed, investing in health, education and social protection will help populations become more resilient in the face of shocks and stresses by ensuring that they have the building blocks necessary to cope with the impacts of crises, that they do not fall too far behind and that they are able to rebuild in the future.

Human capital investments can have a dual positive effect, and generate lasting returns. Investing in health, education and social protection can have the immediate effect of saving lives and protecting the most vulnerable, while it can also yield substantial benefits over the long term by promoting growth and reinforcing coping capacities against future crises. Indeed, The more human capital an individual acquires early in life, the more effective future investments will be – including for generations to come (Manuelli and Seshadri, 2014<sub>[8]</sub>). At the same time, violence and crises can result in irreversible damage to societies, and once human capital is impacted by violence or crisis, it is very difficult to rebuild (Corral et al., 2020<sub>[7]</sub>).

Mechanisms and practices of resilience emerge out of the necessity to cope with and absorb shocks, rapid change or chronic stress, often as a responses to disaster and conflict, and can determine the rate of recovery of populations in fragile contexts. Fragility is often prolonged and ingrained, and the actions of DAC members and other international partners will only be effective if they address its root causes and work to support processes from within (OECD, 2008<sub>[58]</sub>). Consideration of human capital in the analysis of fragility can enhance understanding of the consequences of crises and help development partners to prioritise effective and targeted responses that promote resilience.

# Supporting human capital can help place people at the centre of development policy and processes in fragile contexts

States of Fragility 2018 emphasised the importance of "placing people at the centre" of development policies, and of never losing sight "of the end goal of delivering hope and better lives for all people in fragile

contexts" (OECD, 2018<sub>[43]</sub>). Fragility reverberates globally, locally and at the level of individuals. Placing people at the centre of sustainable development in fragile contexts means understanding how the issues that matter to them affect fragility at all levels, especially in contexts where sections of the population are furthest behind. The COVID-19 crisis and its impact on the global economy challenge the ability of governments to ensure the well-being of their populations, and emphasise the importance of having the right mechanisms in place to do so. With less than ten years remaining to meet the deadline for Agenda 2030, success will require a greater focus on the building blocks of sustainable development – health (including proper nutrition) and education – and a renewed focus on providing financial support to those who need it by investing in social protection (Manuel et al., 2018<sub>[3]</sub>).

#### What does it mean to "place people at the centre" of development in fragile contexts?

The OECD methodology aims to introduce a people-centred perspective in its approach to fragility by examining how people's well-being, livelihoods and overall quality of life impact fragility (OECD, 2018<sub>[43]</sub>; OECD, 2016<sub>[107]</sub>). People-centred development means prioritising these three components as a core focus and underlying motivation for policy and programming (OECD DAC, 2019<sub>[108]</sub>; OECD, 2018<sub>[43]</sub>; Norton and Foster, 2001<sub>[32]</sub>). Although policies and programmes that aim to place people at the centre of development may seek to strengthen institutions or infrastructure that people rely upon, the purpose of this support should strive to directly benefit people (OECD, 2018<sub>[43]</sub>). Structural responses to the challenges posed by fragility are typically more visible, easier to manage and evaluate, and may yield more immediate results (OECD, 2018<sub>[43]</sub>). However, policies that prioritise structural change without considering their wider implications often fail to take into account their impacts on people's everyday lives.

Indeed, this approach should seek to influence policies, programmes and institutional arrangements in ways that promote the agendas and agency of people, families and communities, and support their ability to influence their own life goals, hopes and aspirations (Norton and Foster, 2001<sub>[32]</sub>). In practice, this means adapting programmes and policies to consider the current circumstances, livelihood strategies and social environments of the people with whom they work. In contexts that are politically and militarily fragmented, for example, a people-centred approach can mean supporting programmes that reach areas outside state control (e.g. through humanitarian assistance) or supporting community-led responses when fragmentation between local and central governance structures is apparent.

# A "human capital" dimension will add a more nuanced layer of analysis, enhancing the rigour of the OECD Fragility Framework

In 2022, the OECD will add a human capital dimension to its Fragility Framework. The OECD Fragility Framework analyses fragility across economic, environmental, political, security and societal dimensions – offering a nuanced perspective of fragility that supports the need for differentiated approaches based on the interaction of risks and coping capacities that help to manage risk and build resilience (Desai and Forsberg, 2020<sub>[85]</sub>). Because the Fragility Framework focuses on sources of human vulnerability and resilience, a human capital dimension will enhance its rigour by providing evidence that shows how the issues that matter for people shape fragility across all dimensions and at all levels. This evidence will bring these issues to the forefront of policy and programming in fragile contexts, where they can ultimately help support better and more effective policy responses.

## A human capital dimension will make the OECD Fragility Framework more "people-centred"

The OECD's current approach to fragility aims to move beyond the context level to consider indicators of risk and resilience among people, such as food insecurity, socio-economic vulnerability and access to

justice, which are used to assess a context's fragility across economic, environmental, political, security and societal dimensions (Desai and Forsberg, 2020<sub>[85]</sub>).<sup>10</sup> *States of Fragility* 2018 calls for the inclusion of people in fragile contexts as arbiters, and recommends the introduction of alternative metrics to weigh success in order to better ascertain if development is being delivered in ways that do no harm, build resilience and reinforce the social contract. In considering the need for "alternative metrics to weigh success", and in continuing to develop the OECD Fragility framework as a tool for policy makers and practitioners to identify the risks and coping capacities that shape fragility, it will be important for the OECD, through its approach, to further highlight the areas where donors can provide tangible support for peoplecentred policies.

Adding a human capital dimension will consolidate "people-centred" indicators, providing concrete evidence that shows how peoples' lives, livelihoods and well-being shape fragility. Indeed, as highlighted in Chapter 1, assessing a population's level of human capital is useful because it provides measurable evidence for the return on investment in people – thus helping to provide a tangible understanding of what shapes fragility from the perspective of the individual. A human capital dimension will draw attention to elements of human vulnerability and resilience that may not be captured explicitly in the current fragility framework. Indeed, the scores of each context in the framework reflect dynamic undercurrents of fragility within that context (Desai and Forsberg, 2020<sub>[85]</sub>). Identifying pockets of fragility such as those impacted by human capital can inform more disaggregated and "people-centred" policies (OECD DAC, 2019<sub>[108]</sub>), facilitating co-ordination and helping development partners target their work according to need (Custer et al., 2017<sub>[109]</sub>; Manuel et al., 2019<sub>[110]</sub>).

## A human capital dimension will build upon a systems approach to analysing fragility

Systems thinking provides a foundation to the OECD's definition of fragility, and a useful framework for analysing fragility (Desai and Forsberg, 2020<sub>[85]</sub>). The OECD Fragility framework provides a (previously lacking) language to analyse the intersection of risk, resilience and fragility in order to inform complex and systems-based approaches, which help move beyond mono-causal explanations of fragility that fail to account for broader system dynamics and inter-connectedness (Desai and Forsberg, 2020<sub>[85]</sub>). *States of Fragility* 2020 re-emphasises the value of systems thinking for understanding and addressing fragility (OECD, 2020<sub>[52]</sub>).

Development partners working in fragile contexts have embraced complexity, systems thinking and resilience-based approaches in recent years, devoting significant resources to piloting and scaling projects (Desai and Forsberg, 2020<sub>[85]</sub>). A human capital dimension will provide another layer of analysis through which pockets of fragility within systems can be examined, further supporting the emphasis on systems and helping to reinforce the strength of the Fragility Framework. This will help to facilitate the learning, experimentation and adaptation required to navigate complex environments in fragile contexts by providing concrete examples to development partners operating in fragile contexts.

Human capital's links across the five dimensions of fragility also serve as a further example of the complexity and intersectionality of fragility. The examination of new indicators and will serve as part of a broader development and refining of the OECD Fragility Framework for 2022 and beyond (Desai and Forsberg, 2020<sub>[85]</sub>). As the OECD seeks to adapt its analysis of fragility to current needs, a better understanding of the intersectionality of fragility will help to evolve and deepen this analysis even further.

\_

<sup>&</sup>lt;sup>10</sup> Additional information on each dimension and what it measures, as well as the methodology for States of Fragility, is available on the States of Fragility platform, launched in October 2019 and containing the most up-to-date data and evidence on the states of fragility in fragile contexts (OECD, 2020<sub>[39]</sub>).

## A human capital dimension will merit a re-examination of fragility indicators

Each dimension on the OECD Fragility Framework is represented by 8-12 indicators – for a total of 44 across the 5 dimensions of fragility. The framework captures the diversity of contexts affected by fragility and the dimensions of fragility in each context where indicators point to encouraging or worrying performance. (OECD, 2020<sub>[52]</sub>). In so doing, the Fragility Framework captures the intersection of fragility, risk and resilience, informing donors where and how they can intervene to address the root causes of fragility in each dimension, while bolstering sources of resilience against it (Bosetti, Ivanovic and Munshey, 2016<sub>[111]</sub>; OECD, 2020<sub>[52]</sub>).

The addition of "human capital" as a dimension to the Fragility Framework would merit the examination of existing indicators and the addition of new ones – offering a more robust analysis of the risks and coping capacities that shape fragility. This includes the addition of indicators that explore the health and education of populations in a more disaggregated manner, helping to draw out a more nuanced analysis of human capital and its implications for fragility. Annex A details the OECD's process for choosing indicators to add to the Fragility Framework, and gives a preview of 13 indicators which have the potential to represent the risks and coping capacities that are important for building and preserving human capital.

# References

Adams-Kane, J. and J. Lim (2014), <i>Institutional Quality Mediates the Effect of Human Capital on Economic Performance</i> , <a href="https://doi.org/10.1111/rode.12236">https://doi.org/10.1111/rode.12236</a> .	[103]
Akresh, R. et al. (2012), <i>War and Stature: Growing Up during the Nigerian Civil War</i> , <a href="https://pubs.aeaweb.org/doi/pdfplus/10.1257/aer.102.3.273">https://pubs.aeaweb.org/doi/pdfplus/10.1257/aer.102.3.273</a> .	[91]
Albrectsen, A. and S. Giannini (2020), "COVID-19 school closures around the world will hit girls hardest", <i>Plan International blog</i> , <a href="https://plan-international.org/blog/2020/03/covid-19-school-closures-hit-girls-hardest">https://plan-international.org/blog/2020/03/covid-19-school-closures-hit-girls-hardest</a> (accessed on 9 April 2020).	[54]
Andrabi, T., B. Daniels and J. Das (2020), <i>Human Capital Accumulation and Disasters: Evidence from the Pakistan Earthquake of 2005</i> , <a href="https://doi.org/10.35489/BSG-RISE-WP_2020/039">https://doi.org/10.35489/BSG-RISE-WP_2020/039</a> .	[57]
Avitabile, C. et al. (2020), <i>Insights from Disaggregating the Human Capital Index</i> , World Bank, Washington, DC, <a href="http://documents.worldbank.org/curated/en/306651578290912072/Insights-from-Disaggregating-the-Human-Capital-Index">http://documents.worldbank.org/curated/en/306651578290912072/Insights-from-Disaggregating-the-Human-Capital-Index</a> .	[93]
Bandiera, O. et al. (2020), Do School Closures During an Epidemic have Persistent Effects? Evidence from Sierra Leone in the time of Ebola, University College, London, http://www.homepages.ucl.ac.uk/~uctpimr/research/ELA_SL.pdf.	[55]
Bedoya Arguelles, G. et al. (2019), No Household Left Behind: Afghanistan Targeting the Ultra Poor Impact Evaluation, <a href="http://documents1.worldbank.org/curated/en/855831560172245349/pdf/No-Household-Left-Behind-Afghanistan-Targeting-the-Ultra-Poor-Impact-Evaluation.pdf">http://documents1.worldbank.org/curated/en/855831560172245349/pdf/No-Household-Left-Behind-Afghanistan-Targeting-the-Ultra-Poor-Impact-Evaluation.pdf</a> .	[73]
Bernard, J., B. Coulibaly and R. Winthrop (2020), <i>Education is crucial to Africa's COVID-19 response</i> , Brookings, <a href="https://www.brookings.edu/opinions/education-is-crucial-to-africas-covid-19-response/">https://www.brookings.edu/opinions/education-is-crucial-to-africas-covid-19-response/</a> .	[37]
Betts, A., N. Omata and O. Sterck (2018), Refugee Economies in Kenya.	[45]
Bhalotra, S. and S. Rawlings (2013), "Gradients of the intergenerational transmission of health in developing countries", <i>Discussion Paper</i> , No. 4353, Institute for the Study of Labor, Bonn, <a href="http://ftp.iza.org/dp4353.pdf">http://ftp.iza.org/dp4353.pdf</a> .	[19]
Bosetti, L., A. Ivanovic and M. Munshey (2016), "Fragility, risk, and resilience: A review of existing frameworks", <i>Background Paper</i> , United Nations University Centre for Policy Research, New York, <a href="https://i.unu.edu/media/cpr.unu.edu/attachment/2232/Assessing-Fragility-Risk-and-Resilience-Frameworks.pdf">https://i.unu.edu/media/cpr.unu.edu/attachment/2232/Assessing-Fragility-Risk-and-Resilience-Frameworks.pdf</a> .	[111]
Bosquet, F. (2020), To end global poverty, invest in peace,	[104]

in-peace/.	
Botev, J. et al. (2019), "A new macroeconomic measure of human capital with strong empirical links to productivity", <i>OECD Economics Department Working Papers</i> , No. 1575, OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/d12d7305-en">https://dx.doi.org/10.1787/d12d7305-en</a> .	[4]
Briody, C. et al. (2018), "Review of attacks on health care facilities in six conflicts of the past three decades", <i>Conflict and Health</i> , Vol. 12/19, <a href="https://conflictandhealth.biomedcentral.com/articles/10.1186/s13031-018-0152-2#Sec5">https://conflictandhealth.biomedcentral.com/articles/10.1186/s13031-018-0152-2#Sec5</a> .	[62]
Brune, L. et al. (2020), Social Protection Amidst Social Upheaval: Examining the Impact of a Multi-Faceted Program for Ultra-Poor Households in Yemen, <a href="https://www.cgdev.org/sites/default/files/social-protection-amidst-social-upheaval-examining-impact-multi-faceted-program-ultra.pdf">https://www.cgdev.org/sites/default/files/social-protection-amidst-social-upheaval-examining-impact-multi-faceted-program-ultra.pdf</a> .	[78]
Bushby, K. and E. Stites (2020), Cross-Border Dynamics in the Uganda–Kenya–South Sudan Borderlands Cluster, World Bank, <a href="https://openknowledge.worldbank.org/handle/10986/33513">https://openknowledge.worldbank.org/handle/10986/33513</a> .	[101]
Caprioli, M. (2005), "Primed for violence: The role of gender inequality in predicting internal conflict", <i>International Studies Quarterly</i> , Vol. 49/2, pp. 161–178,, <a href="https://doi.org/10.1111/j.0020-8833.2005.00340.x">https://doi.org/10.1111/j.0020-8833.2005.00340.x</a> .	[105]
Carvalho, S. and S. and Hares (2020), Six Ways COVID-19 Will Shape the Future of Education, <a href="https://www.cgdev.org/blog/six-ways-covid-19-will-shape-future-education">https://www.cgdev.org/blog/six-ways-covid-19-will-shape-future-education</a> .	[81]
Chowdhury, R., E. Collins and M. Kaivan (2016), Valuing Assets Provided to Low-Income Households in South Sudan, <a href="http://bracultrapoorgraduation.org/wp-content/uploads/2020/06/2016-South-Sudan-BRAC-UPGI-TA.pdf">http://bracultrapoorgraduation.org/wp-content/uploads/2020/06/2016-South-Sudan-BRAC-UPGI-TA.pdf</a> .	[79]
Christensen, M. (2019), Feminization of Poverty: Causes and Implications, SpringerLink, <a href="https://doi.org/10.1007/978-3-319-70060-1">https://doi.org/10.1007/978-3-319-70060-1</a> 6-1.	[86]
Collin, M. and D. Weil (2020), "The Effect of Increasing Human Capital Investment on Economic Growth and Poverty: A Simulation Exercise", <i>Journal of Human Capital</i> , Vol. 14/1, <a href="https://www.journals.uchicago.edu/doi/pdf/10.1086/708195">https://www.journals.uchicago.edu/doi/pdf/10.1086/708195</a> .	[31]
Corral, P. et al. (2020), Fragility and Conflict: On the Front Lines of the Fight Against Poverty, World Bank, Washington, DC, <a href="https://openknowledge.worldbank.org/handle/10986/33324">https://openknowledge.worldbank.org/handle/10986/33324</a> .	[7]
Cunha, F. and J. Heckman (2007), "The Technology of Skill Formation", <i>American Economic Review</i> , Vol. 97/2, pp. 31-47, <a href="https://www.nber.org/papers/w12840.pdf">https://www.nber.org/papers/w12840.pdf</a> .	[13]
Custer, S. et al. (2017), Beyond the Tyranny of Averages: Development Progress from the Bottom Up, AidData at William & Mary, Williamsburg, VA, <a href="https://www.aiddata.org/publications/beyond-the-tyranny-of-averages-development-progress-from-the-bottom-up">https://www.aiddata.org/publications/beyond-the-tyranny-of-averages-development-progress-from-the-bottom-up</a> .	[109]
Desai, H. (2020), "States of Fragility and Official Development Assistance", OECD Publishing, Paris.	[49]
Desai, H. and E. Forsberg (2020), "States of Fragility: Results of the 2020 Multi-dimensional Fragility Framework", OECD Publishing, Paris.	[85]
Development Initiatives (2015), Getting poverty to zero: financing social protection for least	[82]

developed countries, <a href="http://devinit.org/wp-content/uploads/2015/05/Getting-poverty-to-zero.pdf">http://devinit.org/wp-content/uploads/2015/05/Getting-poverty-to-zero.pdf</a> .	
Devereux, S. and R. Sabates-Wheeler (2004), <i>Transformative Social Protection</i> , <a href="https://www.ids.ac.uk/publications/transformative-social-protection/">https://www.ids.ac.uk/publications/transformative-social-protection/</a> .	[23]
DFID (1999), Sustainable Livelihoods Guidance Sheets, United Kingdom Department for International Development (DFID), London, <a href="https://www.ennonline.net/attachments/872/section2.pdf">https://www.ennonline.net/attachments/872/section2.pdf</a> .	[30]
Dias, J. and E. Tebaldi (2012), "Institutions, human capital, and growth: the institutional mechanism", <i>Structural Change and Economic Dynamics</i> , Vol. 23, <a href="https://www.academia.edu/23533665/Institutions_human_capital_and_growth_The_institution_al_mechanism">https://www.academia.edu/23533665/Institutions_human_capital_and_growth_The_institution_al_mechanism</a> .	[102]
Diriba, W., K. Mohammed and K. Hussein (2017), "The contribution of Productive Safety Net Program for food security of the rural households in the case of Bale Zone, Southeast Ethiopia", <i>Agriculture &amp; Food Security</i> , <a href="https://doi.org/10.1186/s40066-017-0126-4">https://doi.org/10.1186/s40066-017-0126-4</a> .	[76]
Dorsch, M., P. Maarek and K. Dunz (2015), <i>Macro shocks and costly political action in non-democracies</i> , <a href="http://dx.doi.org/10.1007/s11127-015-0239-x">http://dx.doi.org/10.1007/s11127-015-0239-x</a> .	[100]
Endale, K., A. Alexander Pick and T. Woldehanna (2019), Financing Social Protection in Ethiopia: A Long-Term Perspective, <a href="https://www.oecd-ilibrary.org/docserver/9ce809d8-en.pdf?expires=1598786502&amp;id=id&amp;accname=ocid84004878&amp;checksum=2BD556515C12F4B97C2E07B7E188AC36">https://www.oecd-ilibrary.org/docserver/9ce809d8-en.pdf?expires=1598786502&amp;id=id&amp;accname=ocid84004878&amp;checksum=2BD556515C12F4B97C2E07B7E188AC36</a> .	[74]
FAO (2020), <i>The State of Food Security and Nutrition in the World 2020</i> , Food and Agriculture Organization (FAO), Rome, <a href="http://www.fao.org/3/ca9692en/online/ca9692en.html">http://www.fao.org/3/ca9692en/online/ca9692en.html</a> .	[63]
FAO (2008), Protecting Africa's future: Livelihood-basedsocial protection for orphans and vulnerablechildren (OVC) in east and southern Africa, <a href="http://www.fao.org/3/a-al048e.pdf">http://www.fao.org/3/a-al048e.pdf</a> .	[28]
Flabbi, L. and R. Gatti (2018), "A primer on human capital", <i>Policy Research Working Paper</i> , No. 8309, World Bank, Washington, DC, <a href="http://dx.doi.org/10.1596/1813-9450-8309">http://dx.doi.org/10.1596/1813-9450-8309</a> .	[6]
Flavio, C. and J. Heckman (2007), <i>The Technology of Skill Formation</i> , <a href="http://jenni.uchicago.edu/papers/Cunha-Heckman">http://jenni.uchicago.edu/papers/Cunha-Heckman</a> AER v97n2 2007.pdf.	[96]
Furukawa, M. and D. Deng (2019), Social Capital Across Agro-Pastoral Assets in the Abyei Area With Reference to Amiet "Peace" Market, <a href="https://doi.org/10.1177/1542316619847638">https://doi.org/10.1177/1542316619847638</a> .	[44]
Gentilini, U. et al. (2020), Social Protection and Jobs Responses to COVID-19: a real-time review of country measures, World Bank Group, <a href="https://documents.worldbank.org/en/publication/documents-reports/documentdetail/454671594649637530/social-protection-and-jobs-responses-to-coid-19-a-real-time-review-of-country-measures">https://documents.worldbank.org/en/publication/documents-reports/documentdetail/454671594649637530/social-protection-and-jobs-responses-to-coid-19-a-real-time-review-of-country-measures</a> .	[71]
Gilleskie, D. and D. Hoffman (2014), "Health Capital and Human Capital as Explanations for Health-Related Wage Disparities", <i>Journal of Human Capital</i> , Vol. 8/3, pp. 235-273, <a href="http://dx.doi.org/10.1086/677855">http://dx.doi.org/10.1086/677855</a> .	[10]
Green, D. (2012), From Poverty to Power: How Active Citizens and Effective States can Change the World, Oxfam International, <a href="https://s3.amazonaws.com/oxfam-">https://s3.amazonaws.com/oxfam-</a>	[24]

us/www/static/media/files/From_Poverty_to_Power_2nd_Edition.pdf.	
Gruber, J. (ed.) (2009), <i>Mental Health in Childhood and Human Capital</i> , <a href="http://www.nber.org/chapters/c0590">http://www.nber.org/chapters/c0590</a> .	[18]
Grun, R., A. Semlali and F. Vandeninden (2020), <i>The virus that spurred Burkina Faso and African nations to scale up its social safety nets</i> , <a href="https://blogs.worldbank.org/nasikiliza/virus-spurred-burkina-faso-and-african-nations-scale-its-social-safety-nets?cid=EXT_WBBlogTweetableShare_D_EXT">https://blogs.worldbank.org/nasikiliza/virus-spurred-burkina-faso-and-african-nations-scale-its-social-safety-nets?cid=EXT_WBBlogTweetableShare_D_EXT</a> .	[72]
Haldane, A. (2020), <i>Reweaving the social fabric after the crisis</i> , <a href="https://www.ft.com/content/fbb1ef1c-7ff8-11ea-b0fb-13524ae1056b">https://www.ft.com/content/fbb1ef1c-7ff8-11ea-b0fb-13524ae1056b</a> .	[36]
Halkia, M. et al. (2019), <i>Dynamic Global Conflict Risk Index</i> , Joint Research Centre, European Commission, Ispra, Italy, <a href="https://publications.jrc.ec.europa.eu/repository/bitstream/JRC118701/dynamic_gcri_technical_report_1.pdf">https://publications.jrc.ec.europa.eu/repository/bitstream/JRC118701/dynamic_gcri_technical_report_1.pdf</a> .	[90]
Hanna, R. and J. Cheah (2020), <i>Social Protection in Fragile States</i> , IGC, <a href="https://www.theigc.org/wp-content/uploads/2020/06/hanna-2020-social-protection-brief.pdf">https://www.theigc.org/wp-content/uploads/2020/06/hanna-2020-social-protection-brief.pdf</a> .	[27]
Hoddinott, J. and H. Alderman (2013), <i>The Economic Rationale for Investing in Stunting Reduction</i> , <a href="http://dx.doi.org/10.1111/mcn.12080">http://dx.doi.org/10.1111/mcn.12080</a> .	[17]
ILO (2018), Women and Men in the Informal Economy: a Statistical Picture, <a href="https://www.ilo.org/global/publications/books/WCMS_626831/langen/index.htm">https://www.ilo.org/global/publications/books/WCMS_626831/langen/index.htm</a> .	[98]
INFORM (2017), <i>Index for Risk Management</i> , <a href="http://publications.europa.eu/resource/cellar/b1ef756c-5fbc-11e7-954d-01aa75ed71a1.0001.02/DOC_1">http://publications.europa.eu/resource/cellar/b1ef756c-5fbc-11e7-954d-01aa75ed71a1.0001.02/DOC_1</a> .	[122]
Kawachi, I. and B. Kennedy (1997), "Social Capital, Income Inequality, and mortality", <i>American Journal of Public Health</i> , Vol. 87/9, <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1380975/pdf/amjph00508-0093.pdf">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1380975/pdf/amjph00508-0093.pdf</a> .	[38]
Khodr, A. (2020), <i>In Ethiopia, protecting vulnerable families becomes more urgent as COVID-19 takes its economic toll</i> , <a href="https://www.unicef.org/ethiopia/stories/ethiopia-protecting-vulnerable-families-becomes-more-urgent-covid-19-takes-its-economic">https://www.unicef.org/ethiopia/stories/ethiopia-protecting-vulnerable-families-becomes-more-urgent-covid-19-takes-its-economic</a> .	[75]
Kim, J. (2018), Eliminating Poverty in the 21st Century: The Role of Health and Human Capital, <a href="http://dx.doi.org/doi.org/10.1001/jama.2018.13709">http://dx.doi.org/doi.org/10.1001/jama.2018.13709</a> .	[14]
Lakner, C. et al. (2020), How Much Does Reducing Inequality Matter for Global Poverty? (English), <a href="https://documents.worldbank.org/en/publication/documents-reports/documentdetail/328651559243659214/how-much-does-reducing-inequality-matter-for-global-poverty">https://documents.worldbank.org/en/publication/documents-reports/documentdetail/328651559243659214/how-much-does-reducing-inequality-matter-for-global-poverty</a> .	[84]
Lederman, L. Daniel and A. Menéndez (2002), <i>Violent Crime: Does Social Capital Matter?</i> , <a href="http://dx.doi.org/10.1086/342422">http://dx.doi.org/10.1086/342422</a> .	[106]
Manuelli, R. and A. Seshadri (2014), "Human Capital and the Wealth of Nations", Vol. 104/9, <a href="http://dx.doi.org/10.1257/aer.104.9.2736">http://dx.doi.org/10.1257/aer.104.9.2736</a> .	[8]
Manuel, M. et al. (2019), <i>Subnational Investment in Human Capital</i> , Overseas Development Institute/Development Initiatives, London/Bristol, <a href="https://www.odi.org/publications/11308-">https://www.odi.org/publications/11308-</a>	[110]

#### subnational-investment-human-capital.

- Manuel, M. et al. (2018), *Financing the end of extreme poverty*, Overseas Development Institute, <a href="https://www.odi.org/sites/odi.org.uk/files/resource-documents/12411.pdf">https://www.odi.org/sites/odi.org.uk/files/resource-documents/12411.pdf</a>.
- [50]

[3]

Marley, J. and H. Desai (2020), "Fragility and Agenda 2030".

- 1001
- Marquez, P. and M. Walker (2016), *Mental health services in situations of conflict, fragility and violence: What to do?*, <a href="https://blogs.worldbank.org/health/mental-health-services-situations-conflict-fragility-and-violence-what-do">https://blogs.worldbank.org/health/mental-health-services-situations-conflict-fragility-and-violence-what-do</a>.
- [89]
- McDonnell, Anthony; Samman, Emma (2020), *Ensuring no one is 'left behind' in health*, <a href="https://www.odi.org/sites/odi.org.uk/files/resource-documents/lnob\_in\_health\_wp587.pdf">https://www.odi.org/sites/odi.org.uk/files/resource-documents/lnob\_in\_health\_wp587.pdf</a>.
- [21]
- Moreira da Silva, J. and S. Moorehead (2020), *Aid in the time of COVID-19 3 things donors can do now*, <a href="https://www.devex.com/news/opinion-aid-in-the-time-of-covid-19-3-things-donors-can-do-now-96848">https://www.devex.com/news/opinion-aid-in-the-time-of-covid-19-3-things-donors-can-do-now-96848</a>.
- [61]
- MSF (2020), Women and girls face greater dangers during COVID-19 pandemic, https://www.msf.org/women-and-girls-face-greater-dangers-during-covid-19-pandemic.
- [66]
- Norton, A. and M. Foster (2001), *The Potential of Using Sustainable LivelihoodsApproaches in Poverty Reduction Strategy Papers*, <a href="https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/2724.pdf">https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/2724.pdf</a>.

[32]

OECD (2020), COVID-19 Global Pandemic, Joint Statement by the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD), <a href="http://www.oecd.org/dac/development-assistance-committee/DAC-Joint-Statement-COVID-19.pdf">http://www.oecd.org/dac/development-assistance-committee/DAC-Joint-Statement-COVID-19.pdf</a>.

[80]

OECD (2020), *Detailed aid statistics: ODA Official development assistance: disbursements*, <a href="https://doi.org/10.1787/data-00069-en">https://doi.org/10.1787/data-00069-en</a>.

[83]

OECD (2020), States of Fragility 2020, OECD Publishing, Paris.

[52]

OECD (2020), States of Fragility platform (webpage), http://www3.compareyourcountry.org/states-of-fragility/overview/0/. [39]

OECD (2019), Enabling Women's Economic Empowerment: New Approaches to Unpaid Care Work in Devloping Countries, <a href="https://doi.org/10.1787/ec90d1b1-en">https://doi.org/10.1787/ec90d1b1-en</a>.

[99]

OECD (2018), *States of Fragility 2018*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264302075-en.

[107]

[43]

OECD (2016), *States of Fragility 2016*, OECD Publishing, Paris, <a href="https://www.oecd-ilibrary.org/development/states-of-fragility-2016\_9789264267213-en">https://www.oecd-ilibrary.org/development/states-of-fragility-2016\_9789264267213-en</a>.

[29]

OECD (2014), *Guidelines for Resilience Systems Analysis*, OECD Publishing, Paris, https://www.oecd.org/dac/Resilience%20Systems%20Analysis%20FINAL.pdf.

OECD (2014), Looking at social protection globally, in the OECD and in the Asia/Pacific region, OECD Publishing, Paris.

[22]

OECD (2008), *Handbook on Constructing Composite Indicators*, OECD Publishing, Paris, <a href="https://www.oecd.org/sdd/42495745.pdf">https://www.oecd.org/sdd/42495745.pdf</a>.

[112]

OECD (2008), <i>The OECD DAC Handbook on Security System Reform: Supporting Security and Justice</i> , OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/9789264027862-en">https://dx.doi.org/10.1787/9789264027862-en</a> .	[58]
OECD (2001), <i>The Well-Being of Nations</i> , OECD Publishing, Paris, <a href="http://www.oecd.org/site/worldforum/33703702.pdf">http://www.oecd.org/site/worldforum/33703702.pdf</a> .	[35]
OECD DAC (2019), <i>DAC Recommendation on the Humanitarian-Development-Peace Nexus</i> , OECD Publishing, Paris, <a href="https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-5019">https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-5019</a> .	[108]
OECD/PSI (2020), Rural Development Strategy Review of Ethiopia: Reaping the Benefits of Urbanisation, OECD Development Pathways, OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/a325a658-en">https://dx.doi.org/10.1787/a325a658-en</a> .	[77]
Papoulidis, J. (2020), <i>Five ways to build resilience in fragile health systems</i> , <a href="https://www.thenewhumanitarian.org/opinion/2020/05/13/Fragile-State-Index-global-health">https://www.thenewhumanitarian.org/opinion/2020/05/13/Fragile-State-Index-global-health</a> .	[41]
Psacharopoulos, G. and H. Patrinos (2018), Return to Investment on Education: a Decimal Review of the Global Literature, <a href="http://hdl.handle.net/10986/29672">http://hdl.handle.net/10986/29672</a> .	[9]
Remes, J., M. Wilson and A. and Ramdorai (2020), <i>How investing in health has a significant economic payoff for developing economies</i> , <a href="https://www.brookings.edu/blog/future-development/2020/07/21/how-investing-in-health-has-a-significant-economic-payoff-for-developing-economies/">https://www.brookings.edu/blog/future-development/2020/07/21/how-investing-in-health-has-a-significant-economic-payoff-for-developing-economies/</a> .	[16]
Rutkowski, M. (2020), <i>How can social protection can help countries cope with COVID-19</i> , <a href="https://blogs.worldbank.org/voices/how-social-protection-can-help-countries-cope-covid-19">https://blogs.worldbank.org/voices/how-social-protection-can-help-countries-cope-covid-19</a> .	[69]
Rutkowski, M. (2018), <i>Using adaptive social protection to cope with crisis and build resilience</i> , <a href="https://blogs.worldbank.org/voices/using-adaptive-social-protection-cope-crisis-and-build-resilience">https://blogs.worldbank.org/voices/using-adaptive-social-protection-cope-crisis-and-build-resilience</a> .	[25]
Santos, M. (2009), <i>Human Capital and the Quality of Education in a Poverty Trap Model</i> , <a href="http://dx.doi.org/10.1080/13600818.2010.551003">http://dx.doi.org/10.1080/13600818.2010.551003</a> .	[12]
Sayeh, A. and R. Chami (2020), <i>The Impact of COVID-19 on Remittance Flows</i> , <a href="https://www.imf.org/external/pubs/ft/fandd/2020/06/pdf/COVID19-pandemic-impact-on-remittance-flows-sayeh.pdf">https://www.imf.org/external/pubs/ft/fandd/2020/06/pdf/COVID19-pandemic-impact-on-remittance-flows-sayeh.pdf</a> .	[70]
Schaaf, M., S. Topp and N. Moses (2017), "From favours to entitlements: community voice and action and health service quality in Zambia", <i>Health Policy and Planning</i> , Vol. 32/6, pp. 847–859, <a href="https://pubmed.ncbi.nlm.nih.gov/28369410/">https://pubmed.ncbi.nlm.nih.gov/28369410/</a> .	[42]
Schuller, T. (2001), <i>The Complementary Roles of Human and Social Capital</i> , <a href="https://www.oecd.org/innovation/research/1825424.pdf">https://www.oecd.org/innovation/research/1825424.pdf</a> .	[40]
Scoones, I. (1998), Sustainable Rural Livelihoods: a Framework for Analysis, <a href="https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/3390/Wp72.pdf?sequence=1">https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/3390/Wp72.pdf?sequence=1</a> .	[34]
Smith, E. (2020), "Many girls won't go back to school when lockdown is over", <i>Devex News</i> , <a href="https://www.devex.com/news/many-girls-won-t-go-back-to-school-when-lockdown-is-over-97322">https://www.devex.com/news/many-girls-won-t-go-back-to-school-when-lockdown-is-over-97322</a> .	[97]
UN (2020), A UN Framework for the Immediate Socio-Economic Response to COVID-19.	[60]

https://unsdg.un.org/resources/un-framework-immediate-socio-economic-response-covid-19.	
UN (2020), World Youth Report: Youth Social Entrepreneurship and the 2030 Agenda, United Nations, New York, <a href="https://www.un.org/development/desa/youth/wp-content/uploads/sites/21/2020/07/2020-World-Youth-Report-FULL-FINAL.pdf">https://www.un.org/development/desa/youth/wp-content/uploads/sites/21/2020/07/2020-World-Youth-Report-FULL-FINAL.pdf</a> .	[51]
UN DESA (2020), World Population Prospects 2019 (database), United Nations Department of Economic and Social Affairs (UN DESA), New York, <a href="https://population.un.org/wpp/">https://population.un.org/wpp/</a> .	[67]
UNDP (2020), COVID-19 and Human Development: Assessing the Crisis, Envisioning the Recovery, United Nations Development Programme (UNDP), New York, <a href="http://hdr.undp.org/sites/default/files/covid-19">http://hdr.undp.org/sites/default/files/covid-19</a> and <a 2018-mpi"="" en="" hdr.undp.org="" href="http://hdr.undp.org/sites/default&lt;/td&gt;&lt;td&gt;[56]&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;UNDP (2019), &lt;i&gt;The 2019 Global Multidimensional Poverty Index (MPI)&lt;/i&gt;, &lt;a href=" http:="">http://hdr.undp.org/en/2018-MPI</a> .	[5]
UNDP (2017), Application of the Sustainable Livelihoods Framework in Development Projects, <a href="https://www.latinamerica.undp.org/content/rblac/en/home/library/poverty/guidance-note-application-of-the-sustainable-livelihoods-framew.html">https://www.latinamerica.undp.org/content/rblac/en/home/library/poverty/guidance-note-application-of-the-sustainable-livelihoods-framew.html</a> .	[1]
UNDP (n.d.), Education Index (Database), <a href="http://hdr.undp.org/en/content/education-index">http://hdr.undp.org/en/content/education-index</a> .	[113]
UNDP (n.d.), Gender Inequality Index (GII), <a href="http://hdr.undp.org/en/content/gender-inequality-index-gii">http://hdr.undp.org/en/content/gender-inequality-index-gii</a> .	[123]
UNDP (n.d.), Livelihoods and Economic Recovery, <a href="https://www.undp.org/content/undp/en/home/2030-agenda-for-sustainable-development/prosperity/recovery-solutions-and-human-mobility/economic-recovery.html">https://www.undp.org/content/undp/en/home/2030-agenda-for-sustainable-development/prosperity/recovery-solutions-and-human-mobility/economic-recovery.html</a> .	[33]
UNESCO (2020), COVID-19 Educational Disruption and Response (webpage), <a href="https://en.unesco.org/covid19/educationresponse">https://en.unesco.org/covid19/educationresponse</a> .	[47]
UNESCO Institute for Statistics (2018), Completion rate, primary education, female.	[115]
UNESCO Institute for Statistics (2018), Government expenditure on education as a % of GDP, <a href="http://data.uis.unesco.org/index.aspx?queryid=3373">http://data.uis.unesco.org/index.aspx?queryid=3373</a> .	[117]
UNESCO Institute for Statistics (2018), <i>Out-of-school rate for children of primary school age,</i> both sexes, <a href="http://data.uis.unesco.org/index.aspx?queryid=123">http://data.uis.unesco.org/index.aspx?queryid=123</a> .	[114]
UNICEF (2020), <i>Under-5 mortality</i> , <a href="https://data.unicef.org/topic/child-survival/under-five-mortality/">https://data.unicef.org/topic/child-survival/under-five-mortality/</a> .	[120]
UNICEF (2019), Every Child Learns UNICEF Education Strategy 2019-2030, <a href="https://www.unicef.org/sites/default/files/2019-09/UNICEF-education-strategy-2019-2030_0.pdf">https://www.unicef.org/sites/default/files/2019-09/UNICEF-education-strategy-2019-2030_0.pdf</a> .	[20]
UNICEF (2017), Maternal Mortality Ratio, (maternal deaths per 100 000 live births), <a href="https://data.unicef.org/topic/maternal-health/maternal-mortality/">https://data.unicef.org/topic/maternal-health/maternal-mortality/</a> .	[121]
UNICEF (2016), Ending Extreme Poverty: A Focus on Children, <a href="https://www.unicef.org/publications/index_92826.html">https://www.unicef.org/publications/index_92826.html</a> .	[87]
UNICEF/WHO/World Bank Group (2020), Levels and Trends in Child Malnutrition: Key Findings of the 2020 Edition of the Joint Child Malnutrition Estimates	[88]

https://www.who.int/publications/i/item/jme-2020-edition.

Warren, H. and E. Wagner (2020), <i>Save Our Education</i> , Save the Children, London, <a href="https://reliefweb.int/sites/reliefweb.int/files/resources/Save%20Our%20Education%20report.pg">https://reliefweb.int/sites/reliefweb.int/files/resources/Save%20Our%20Education%20report.pg</a> <a en_hsskeycomponents.pdf?ua='1"' healthsystems="" href="https://de.dec.no.ndm.new.new.new.new.new.new.new.new.new.new&lt;/th&gt;&lt;th&gt;[53]&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;WHO (2010), Key components of a well functioning health system, &lt;a href=" https:="" www.who.int="">https://www.who.int/healthsystems/EN_HSSkeycomponents.pdf?ua=1</a> . <td>[59]</td>	[59]
World Bank (2020), ASPIRE: The Atlas of Social Protection Indicators of Resilience and Equity (database), <a href="https://www.worldbank.org/en/data/datatopics/aspire">https://www.worldbank.org/en/data/datatopics/aspire</a> .	[68]
World Bank (2020), <i>Human Capital Index (Database)</i> , <a href="https://databank.worldbank.org/source/human-capital-index">https://databank.worldbank.org/source/human-capital-index</a> .	[48]
World Bank (2020), <i>Human Capital Index (Male</i> ), <a href="https://data.worldbank.org/indicator/HD.HCI.OVRL.MA">https://data.worldbank.org/indicator/HD.HCI.OVRL.MA</a> .	[95]
World Bank (2020), <i>Human Capital Index, Female (database)</i> , <a href="https://data.worldbank.org/indicator/HD.HCI.OVRL.FE">https://data.worldbank.org/indicator/HD.HCI.OVRL.FE</a> .	[94]
World Bank (2020), Insights from Disaggregaing the Human Capital Index, <a href="https://documents.worldbank.org/en/publication/documents-reports/documentdetail/306651578290912072/insights-from-disaggregating-the-human-capital-index">https://documents.worldbank.org/en/publication/documents-reports/documentdetail/306651578290912072/insights-from-disaggregating-the-human-capital-index</a> .	[92]
World Bank (2020), <i>The World Bank in Social Protection</i> , <a href="https://www.worldbank.org/en/topic/socialprotection">https://www.worldbank.org/en/topic/socialprotection</a> .	[26]
World Bank (2019), <i>Prevalence of stunting, height for age (% of children aged under 5)</i> , <a href="https://data.worldbank.org/indicator/SH.STA.STNT.ZS">https://data.worldbank.org/indicator/SH.STA.STNT.ZS</a> .	[119]
World Bank (2019), World Development Report 2019: the Changing Nature of Work, <a href="http://dx.doi.org/10.1596/978-1-4648-1328-3">http://dx.doi.org/10.1596/978-1-4648-1328-3</a> .	[11]
World Bank (2018), <i>Human Capital Project (webpage)</i> , <a href="https://www.worldbank.org/en/publication/human-capital">https://www.worldbank.org/en/publication/human-capital</a> .	[2]
World Bank (2018), Life expectancy at birth, total (years), <a href="https://data.worldbank.org/indicator/SP.DYN.LE00.IN">https://data.worldbank.org/indicator/SP.DYN.LE00.IN</a> .	[118]
World Bank (2018), <i>Pre-demographic dividend (database)</i> , <a href="https://data.worldbank.org/region/pre-demographic-dividend?view=chart">https://data.worldbank.org/region/pre-demographic-dividend?view=chart</a> .	[46]
World Bank (2018), <i>The Human Capital Project</i> , <a href="https://openknowledge.worldbank.org/handle/10986/30498">https://openknowledge.worldbank.org/handle/10986/30498</a> .	[15]
World Bank (2017), Learning-adjusted years of school, <a href="https://tcdata360.worldbank.org/indicators/h00280750?country=BRA&amp;indicator=40964&amp;viz=bar_chart&amp;years=2017">https://tcdata360.worldbank.org/indicators/h00280750?country=BRA&amp;indicator=40964&amp;viz=bar_chart&amp;years=2017</a> .	[116]
World Food Programme (2020), "WFP Chief warns of hunger pandemic as COVID-19 spreads (Statement to UN Security Council)", <a href="https://www.wfp.org/news/wfp-chief-warns-hunger-pandemic-covid-19-spreads-statement-un-security-council">https://www.wfp.org/news/wfp-chief-warns-hunger-pandemic-covid-19-spreads-statement-un-security-council</a> .	[64]

[65]

World Health Organization (2020), *Gender and COVID-19: Advocacy Brief*, <a href="https://apps.who.int/iris/bitstream/handle/10665/332080/WHO-2019-nCoV-Advocacy\_brief-Gender-2020.1-eng.pdf?sequence=1&isAllowed=y">https://apps.who.int/iris/bitstream/handle/10665/332080/WHO-2019-nCoV-Advocacy\_brief-Gender-2020.1-eng.pdf?sequence=1&isAllowed=y</a>.

# Annex A. Analysing potential indicators for a human capital dimension in the OECD fragility framework

The human (capital) dimension of fragility would represent the sixth dimension on the OECD multidimensional fragility framework, alongside the economic, environmental, political, security and societal dimensions. First introduced in States of Fragility 2016, the current iteration of the Fragility Framework consists of 44 indicators across five dimensions of fragility, with each dimension containing between 8 to 12 indicators that represent risk or coping capacities related to fragility within that dimension. Table A.1 provides an indicative list of potential indicators for the human capital dimension that the OECD will update and refine for States of Fragility 2022 through expert consultation and desk research.

# Why these indicators?

This paper outlines a set of 13 potential indicators for consideration in a "human capital" dimension of the OECD fragility framework. They are intended to represent existing levels of health and education, as well as the potential for people to maintain the health and gain the knowledge necessary to support their future needs. They aim to capture the key elements of measuring and supporting human capital outlined in this paper, as well as elements of vulnerability or inequality that can hold implications for an individual's capacity to build or maintain their human capital. For education, this includes an analysis of overall education access, quality, and quantity, with emphasis on primary schooling. For health, this includes a focus on the overall health of fragile populations with an emphasis on life expectancy, nutrition, and childhood and maternal mortality, along with access to healthcare. For vulnerability and inequality, this includes socio-economic vulnerability, gender inequality and multidimensional poverty.

The below indicators were chosen based on an initial assessment of the availability and quality of data to measure human capital globally as well as whether these data represent an appropriate measure of the links between human capital and fragility. They are intended as an introduction to potential areas of analysis, and are in no way intended as a final decision.

# **Choosing indicators**

As part of this process, the OECD will assess the availability and quality of data to measure human capital globally as well as whether these data represent an appropriate measure of the links between human capital and fragility. There are several criteria for the development of indicators in each dimension of the Fragility framework. The geographic and temporal coverage of the indicator is an important consideration: indicators with global coverage and regular (preferably annual) updates are preferred over region-specific or thematic indicators with inconsistent updates, for example.

The 2020 Fragility framework analyses 175 countries and territories (referred to as contexts) using the most recent year available for each context-indicator pair, with 2019 being the latest year (Desai and Forsberg, 2020<sub>[85]</sub>). Another important consideration is whether an indicator is publicly available and

replicable, as well as whether the source institution has disclosed information as to how they are collecting and publishing the indicator. The Fragility Framework only uses open data, with the metadata for each indicator published on the <u>States of Fragility platform</u>. Finally, the extent to which an indicator is an appropriate measure of an underlying theory or concept, based on the literature and expert opinion, is a significant criterion for its inclusion in the Fragility Framework. It is important for an indicator to be based on a sound theoretical framework (OECD, 2008<sub>[112]</sub>).<sup>11</sup>

The indicators presented in Table A.1 meet one or more of these criteria and thus represent options (rather than a definitive list as presented) for inclusion in a human capital dimension of the Fragility framework. The indicators have global coverage, are publicly available and published regularly with sound underlying metadata, and reflect an appropriate measure of the literature on human capital and fragility as discussed in previous chapters. However, they also come with limitations. The OECD will assess these limitations carefully through an extensive consultative process over the next two years and also consider alternative data sources, including ones yet to be published. The final list will be narrowed to 8-12 of the best available indicators following this process.

Table A.1. Potential indicators for a "human capital" dimension

Indicator	Description	Source	Risk/coping capacity
Education Index	"The Education index is an average of mean years of schooling (of adults) and expected years of schooling (of children), both expressed as an index obtained by scaling with the corresponding maxima" (UNDP, n.d.[113]).	UNDP	Coping capacity
Out-of-school rate for children of primary school age, both sexes	"The rate of out-of-school children is a useful measure for comparison across countries with different population sizes. It combines the number of children of official primary age who never attended school or dropped out, and the population of official primary school age that is nationally and internationally considered as the target population. The higher the rate, the greater the need for interventions to target out-of-school children to achieve the goal of universal primary education" (UNESCO Institute for Statistics, 2018[114])	UNESCO Institute for Statistics (UIS)	Risk
Completion rate, primary education, female	"The completion rate indicates how many persons in a given age group have completed primary, lower secondary, or upper secondary education. It indicates how many children and adolescents enter school on time and progress through the education system without excessive delays" (UNESCO Institute for Statistics, 2018 <sub>[115]</sub> ).	UNESCO Institute for Statistics (UIS)	Coping capacity
Learning-adjusted years of school	"Learning-Adjusted Years of School are calculated by multiplying the estimates of Expected Years of School by the ratio of most recent Harmonized Test Score to 625, where 625 corresponds to advancement attainment on the TIMSS (Trends in International Mathematics and Science Study) test" (World Bank, 2017[116]).	World Bank	Coping capacity
Government expenditure on education as a % of GDP	Government expenditure on education as a % of GDP shows "the proportion of a country's wealth generated during a given year that was spent by government authorities on education. This indicator is useful to compare education expenditure between countries and/or over time in relation to the size of their economy" (UNESCO Institute for Statistics, 2018[117])	UNESCO Institute for Statistics (UIS)	Coping capacity
Life expectancy at birth, total (years)	"Life expectancy at birth indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life" (World Bank, 2018[118]).	World Bank	Coping capacity
Prevalence of stunting, height for age (% of children aged under 5)	"Prevalence of stunting is the percentage of children under age 5 whose height for age is more than two standard deviations below the median for the international reference population ages 0-59 months. For children up to two years old height is measured by recumbent length. For older	World Bank	Risk

<sup>&</sup>lt;sup>11</sup> The States of Fragility online platform also includes a short summary of the theoretical basis for each indicator and its relevance as a risk or coping capacity related to fragility in a given dimension.

	children height is measured by stature while standing. The data are based on the WHO's new child growth standards released in 2006" (World Bank, 2019[119]).		
Under-5 mortality	"Under 5 mortality is the "probability of dying between birth and exactly 5 years of age, expressed per 1 000 live births" (UNICEF, 2020[120])	UNICEF	Risk
Maternal Mortality Ratio, (maternal deaths per 100 000 live births)	"The maternal mortality ratio (MMR) is defined as the number of maternal deaths during a given time period per 100 000 live births during the same time period. It depicts the risk of maternal death relative to the number of live births and essentially captures the risk of death in a single pregnancy or a single live birth" (UNICEF, 2017 <sub>[121]</sub> ).	UNICEF	Risk
Access to health system	Access to health system is "the arithmetic average of different proxy measures, which include physicians' density, health expenditure per capita, measles immunisation coverage and maternal mortality rate" (INFORM, 2017 <sub>[122]</sub> )	INFORM Global Risk Index	Coping capacity
Gender Inequality Index (GII)	"The GII is an inequality index. It measures gender inequalities in three important aspects of human development – reproductive health, measured by maternal mortality ratio and adolescent birth rates; empowerment, measured by proportion of parliamentary seats occupied by females and proportion of adult females and males aged 25 years and older with at least some secondary education; and economic status, expressed as labour market participation and measured by labour force participation rate of female and male populations aged 15 years and older" (UNDP, n.d.[123])	UNDP	Risk
Socio-economic vulnerability	"The socio-economic vulnerability indicator is captured in three areas: development and deprivation, inequality and aid dependency. The development and deprivation component is defined through the Human Development Index (HDI) – measuring development by combining indicators of life expectancy, educational attainment and income into a composite index and the Multidimensional Poverty (MPI) Index. This index identifies overlapping deprivations at the household level across the same three dimensions as the HDI while showing the average number of poor people and deprivations with which poor households contend" (INFORM, 2017 <sub>[122]</sub> ).	INFORM Global Risk Index	Risk
Multidimensional Poverty Index	"The MPI looks beyond income to understand how people experience poverty in multiple and simultaneous ways. It identifies how people are being left behind across three key dimensions: health, education and standard of living, comprising 10 indicators. People who experience deprivation in at least one third of these weighted indicators fall into the category of multidimensionally poor" (UNDP, 2019 <sub>[5]</sub> ).	UNDP	Risk

Note: These are a series of indicators for potential consideration and do not reflect a final decision on indicators for the 2020 Fragility Framework.

