INVESTING IN HUMAN CAPITAL FOR A RESILIENT RECOVERY: The Role of Public Finance
INVESTING IN HUMAN CAPITAL FOR A RESILIENT RECOVERY: *The Role of Public Finance*

**ABSTRACT**

This Approach Paper considers the role of public finance to build, protect and utilize human capital as countries seek to recover from the COVID-19 crisis and lay a foundation for inclusive, resilient and sustainable development. The paper defines the problem in relation to human capital outcomes amid the COVID-19 crisis and outlines three areas for action: policy priorities, governance, and fiscal space for building and utilizing human capital. The paper highlights recent innovations and illustrates actionable steps for the short term as well as directions for the longer term, by country context, with the overarching objective of supporting a resilient recovery.

**ACKNOWLEDGMENTS**

This paper is a joint product of the Equitable Growth, Finance and Institutions (EFI) and Human Development (HD) global practices at the World Bank. Ayhan Kose, Acting Vice President for Equitable Growth, Finance and Institutions, and Mamta Murthi, Vice President for Human Development, provided overall guidance. The team received further guidance from Marcello Estevao, Global Director for Macroeconomic Trade and Investment, and Edward Olowo-Okere, Global Director for Governance.

Hana Brixi and Chiara Bronchi led a team of coauthors including Samer Al-Samarrai, Mary Breeding, Chadi Bou Habib, ZahidHasnain, Igor Kheyfets, Christoph Kurowski, Tracey Lane, Yasuhiro Matsuda, Saw Young Min, Ceren Ozer, Adenike Sherifat Oyeyiola, Laura B. Rawlings, Michael Weber and Timothy Williamson.

We are thankful for extensive comments provided by peer reviewers including Luis Benveniste, James A. Brumby, Tito Cordella, and William F. Maloney. Valuable contributions and comments were also received from: Anders Agerskov, James Anderson, Sameera Maziad Al Tuwajiri, Mary Frances Beaton, Kathleen Beegle, Tania Priscilla Begazo Gomez, Christian Bodewig, Anna Custers, Richard Damania, Amit Dar, Amanda Devercelli, Bill Dorotinsky, Leslie Elder, Pablo Fajnzylber, Isis Gaddis, Koen Martijn Geven, Marelize Gorgens, Pablo Gottret, Margaret Grosh, Caren Grown, Srinivas Gurazada, Daniel Halim, Elisabeth Huybens, Ogo-Oluwa Oluwatoyin Jagha, Bernard James Haven, Kelly Suzanne Johnson, Youngkyu Kang, Young Eun Kim, Stefan G. Koeblerle, Eric Lacey, George Addo Larbi, Kate Mandeville; Massimo Mastruzzi, Carolina Monsalve, Samia Msadek, Andrew Myburgh, Philippe Neves, Tobias Pfitze, Miria Pigato, Shomikho Raha, Siddhartha Raja, Jun Reintschler, Hartwig Schafer, Siddharth Sharma, Meera Shekar, Lynne D. Sherburne-Benz, Elena Sterlin, Ajay Tandon, Margaret Triyana, Robert Utz, Hisham Ahmed Waly, Nuoya Wu, and Xiaoqing Yu. We thank Deepika Davidar and Franklyn Ayensu for editorial assistance, Junya Yuan and Israel David Melendez for graphic design, and Kavoori Lakshmi Diksha Ramesh for references review.
## CONTENTS

| ABBREVIATIONS | 05 |
| FOREWORD | 06 |
| EXECUTIVE SUMMARY | 08 |
| INTRODUCTION | 10 |

### CHAPTER 1
**Human Capital for Recovery and Resilient, Inclusive Development**

1.1 The human capital impacts of the COVID-19 crisis ................................. 12
1.2 The fiscal impacts of the COVID-19 crisis .................................................. 15
1.3 The role of public finance in human capital investments for recovery .......... 17

### CHAPTER 2
**Public Spending to Build, Protect and Utilize Human Capital**

2.1 A human capital outcome-oriented framework for public expenditure .......... 19
2.2 Restoring human capital .............................................................................. 21
   - Controlling the pandemic ........................................................................... 21
   - Regaining health ....................................................................................... 22
   - Bringing children back to school and recovering learning losses ............ 22
   - Protecting young children and building a foundation for human capital development ................................................................. 23
   - Preventing scarring of jobseekers and supporting labor income ............ 24
2.3 Strengthening service delivery systems ...................................................... 26
   - Harnessing technology for service delivery .............................................. 26
   - Strengthening health systems and preparedness ..................................... 27
   - Building resilient education service delivery ......................................... 28
   - Strengthening social protection and labor market systems ....................... 28

### CHAPTER 3
**Governance to Translate Fiscal Policies into Human Capital Outcomes**

3.1 Whole-of-government prioritization of human capital ................................... 31
3.2 Managing public finances for results .......................................................... 33
3.3 Results-oriented workforce management ..................................................... 38
3.4 Transparency, Accountability, and Trust ...................................................... 40

### CHAPTER 4
**Securing Resources for Human Capital Priorities**

4.1 Protecting resources for human capital in times of crisis .............................. 43
4.2 Mobilizing domestic resources with human capital lens ................................ 45
4.3 Finding space within budgets ..................................................................... 48
4.4 Borrowing, debt management and international support for human capital priorities ................................................................. 50
4.5 Reducing the risk and impacts of future crises ............................................ 52
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BISP</td>
<td>Benazir Income Support Program</td>
</tr>
<tr>
<td>CGE</td>
<td>computable general equilibrium</td>
</tr>
<tr>
<td>DSSI</td>
<td>Debt Service Suspension Initiative</td>
</tr>
<tr>
<td>DRM</td>
<td>domestic resource mobilization</td>
</tr>
<tr>
<td>ECD</td>
<td>early-childhood development</td>
</tr>
<tr>
<td>ESMAP</td>
<td>Energy Sector Management Assistance Program</td>
</tr>
<tr>
<td>ETR</td>
<td>Environmental Tax Reform</td>
</tr>
<tr>
<td>G&amp;S</td>
<td>Goods and Services</td>
</tr>
<tr>
<td>GBV</td>
<td>gender-based violence</td>
</tr>
<tr>
<td>HCI</td>
<td>Human Capital Index</td>
</tr>
<tr>
<td>HICs</td>
<td>high-income countries</td>
</tr>
<tr>
<td>HIPC</td>
<td>Heavily Indebted Poor Country</td>
</tr>
<tr>
<td>INTOSAI</td>
<td>International Organization of Supreme Audit Institutions</td>
</tr>
<tr>
<td>LiCs</td>
<td>low-income countries</td>
</tr>
<tr>
<td>LMICs</td>
<td>lower-middle-income countries</td>
</tr>
<tr>
<td>ICT-BPO</td>
<td>Information and Communication Technology/Business Process Outsourcing</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labor Organization</td>
</tr>
<tr>
<td>INFF</td>
<td>Integrated National Financing Framework</td>
</tr>
<tr>
<td>MAMS</td>
<td>Maquette for MDGs Simulation</td>
</tr>
<tr>
<td>MICs</td>
<td>middle-income countries</td>
</tr>
<tr>
<td>MTFF</td>
<td>medium-term fiscal framework</td>
</tr>
<tr>
<td>MTDS</td>
<td>medium-term debt management strategy</td>
</tr>
<tr>
<td>MTEF</td>
<td>medium-term expenditure framework</td>
</tr>
<tr>
<td>MTRS</td>
<td>medium-term revenue strategy</td>
</tr>
<tr>
<td>NIS</td>
<td>National Insurance Services</td>
</tr>
<tr>
<td>NSDS</td>
<td>nutrition-sensitive direct support</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PAN</td>
<td>Articulated Nutrition Budget Program</td>
</tr>
<tr>
<td>PEMANDU</td>
<td>Performance Management &amp; Delivery Unit</td>
</tr>
<tr>
<td>PFM</td>
<td>public financial management</td>
</tr>
<tr>
<td>PPP</td>
<td>public-private partnership</td>
</tr>
<tr>
<td>PRSP</td>
<td>Poverty Reduction Strategy Paper</td>
</tr>
<tr>
<td>RBF</td>
<td>results-based financing</td>
</tr>
<tr>
<td>Rs</td>
<td>Mauritian rupee</td>
</tr>
<tr>
<td>SAI</td>
<td>supreme audit institution</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
</tr>
<tr>
<td>SE</td>
<td>social enterprise</td>
</tr>
<tr>
<td>SUN</td>
<td>Scaling Up Nutrition (movement)</td>
</tr>
<tr>
<td>SWFs</td>
<td>sovereign wealth funds</td>
</tr>
<tr>
<td>TVET</td>
<td>technical and vocational education and training</td>
</tr>
<tr>
<td>UHCI</td>
<td>Utilization-Adjusted Human Capital Index</td>
</tr>
<tr>
<td>UMICs</td>
<td>upper-middle-income countries</td>
</tr>
<tr>
<td>UNFPA</td>
<td>United Nations Population Fund</td>
</tr>
<tr>
<td>UNIFEM</td>
<td>United Nations Development Fund for Women</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
In less than a year, the COVID-19 pandemic has disrupted billions of lives and livelihoods. The pandemic may have erased more than 250 million jobs equivalent in 2020 and pushed 100 million people to extreme poverty. The world’s poorest have been facing surging food insecurity.

Poverty reduction and shared prosperity have suffered their worst setback in decades. A decade of gains in human capital outcomes has been lost. The pandemic has caused disruptions in essential services with severe consequences for under-5 and maternal mortality, unwanted pregnancies, and undiagnosed and untreated noncommunicable diseases. The UN is estimating that there will be 130 million more malnourished children than it had projected before the crisis. Learning poverty, it is estimated, will rise by 10 percentage points to over 60 percent, and a generation of children stands to lose US$10 trillion in future lifetime earnings if there is less than full remediation.

School closures have also contributed to the widening social and economic inequalities. Escalating gender-based violence, rising child marriage rates, and the burden of increased household care have placed the lives of many girls and women in ruin and narrowed their opportunities to pursue other life-fulfilling options. The impacts stand to derail progress toward the Sustainable Development Goals (SDGs).

The COVID-19 shock has also compounded the effects of climate change, which have been intensifying for some time, and thrown into sharp relief the delicate interdependence between people, the planet and the economy. The poor and vulnerable, who typically bear the brunt of natural disasters and violent conflict, have been hit especially hard.

Against this sobering backdrop, it is vitally important that emerging-market and developing economies avoid thinking in terms of a business-as-usual policy package for recovery because it would likely result in a lost decade of development. Rather, governments should take exceptional and urgent action to tackle the combined impact of cascading crises and the interlinkages between people, the planet and the economy while adapting to post-pandemic realities. An urgent pair of priorities is to recover the human capital that has been lost in the wake of the pandemic, and to invest in creating new human capital for a resilient recovery.

Human capital accumulation is not only a productive investment but also critical for green, resilient and inclusive development. Investing in people helps transitioning to a greener economy by reskilling workers to move out of pollution-heavy industries and build the skills needed for green industries. Education for girls, together with family planning, reproductive and sexual health, and economic opportunities for women can have a positive impact on resource use and the environment in fragile and conflict-affected states. Those who have good health and nutrition, relevant and adequate education, savings and alternative livelihoods, as well as a safety net for when things go wrong, can weather a climate shock or pandemic far better than those who do not. Likewise, service delivery systems that are adequately staffed and supplied and adaptive will be able to weather the next crisis. For growth to be truly inclusive, good-quality education, health care, and safety-net programs must reach the poorest and address the needs of the most vulnerable, including people with disabilities.
INVESTING IN HUMAN CAPITAL FOR A RESILIENT RECOVERY: The Role of Public Finance

This Approach Paper complements the Green Resilient and Inclusive Development vision presented to the World Bank Development Committee at the Spring 2021 Meetings, which entails investing in human capital to address core development and sustainability challenges. The paper outlines the role of public finance in advancing human capital outcomes and discusses policy priorities with the overarching objective of supporting a resilient recovery. It shares innovative approaches that have been employed by various countries to improve child nutrition and early-child development; get children back to school and ensure high-quality learning; build shock-resistant, service-delivery platforms, and support livelihoods and productive inclusion, particularly for women and the marginalized.

The paper shows how better governance can improve the impact of government expenditure on human capital outcomes. It provides examples of evidence-based policy prioritization, policy coordination, and outcome-oriented management of government budgets and human resources, with an emphasis on accountability for results, facilitated by digital technologies.

Importantly, the paper explores new avenues for securing resources to pursue human capital priorities. It shows how to find space within constrained budgets, identify the most cost-effective reforms, and protect those specific budget lines that are critical for the continuation of services that have long-term implications for human capital outcomes. Using the lens of human capital outcomes, the paper also explores new opportunities for raising domestic revenues, for approaching debt restructuring and relief, and for planning for future crises. It shows how environment tax reforms and the removal of energy subsidies can create fiscal space for human capital expenditures, while curbing the use of fossil fuels that have negative consequences for health and the environment.

This Approach Paper framed the discussion that took place at the Fifth Human Capital Ministerial Conclave in April 2021. As such, it reflects the innovative experiences shared at the Conclave, and seeks to inform further efforts by governments and international development partners to lay the foundations for a green, resilient and inclusive recovery.

MAMTA MURTHI
World Bank Vice President for Human Development

AYHAN KOSE
Acting Vice President, Equitable Growth, Finance and Institutions (EFI) and Director, Prospects Group
Over the past decade, although significant human capital deficits persisted, many countries made important progress in improving their human capital. Today, the COVID-19 pandemic threatens to reverse many of those gains and recreate preexisting challenges. Urgent action is needed to protect hard-won advances in human capital, particularly among the poor and the vulnerable.

A stable and lasting recovery will hinge on restoring human capital while bolstering service delivery systems that can build, protect and utilize it. What is human capital? It is the knowledge, skills, and health that people accumulate over their lives. It is undeniable that people’s health and education have intrinsic value, but human capital can also serve as a means to important and fulfilling ends, enabling people, for instance, to realize their potential as productive members of society. Greater human capital is associated with higher earnings for people and higher incomes for countries. Building human capital among the poor and the vulnerable also improves equity and social cohesion.

Thus, investing in people must take center stage in any plan to pursue and achieve green, resilient and inclusive development. For rich and poor countries alike, however, the transition from crisis to recovery remains challenging. The pandemic is exacerbating a number of worrisome trends seen over the past decade that threaten to erode growth prospects in developing economies. These include a slowdown in investment, productivity, employment, and poverty reduction; rising debt; and the accelerating destruction of natural capital. For the first time in a generation, the pandemic has reversed what had been a steady but inexorable fall in global poverty. It is estimated, additionally, that in 2020 it pushed more than 100 million people into extreme poverty—a number that is projected to increase in 2021.

Unless they are addressed with decisive investments, the scars of COVID-19 on human capital and future productivity could deepen and turn permanent. Malnutrition and prolonged exposure to stress can have multiple, cumulative, long-term impacts on children. School closures and the increased likelihood of school dropout are eroding the knowledge and skills of the current generation of school children, especially those from poor and vulnerable households. Recent estimates by World Bank staff suggest that learning poverty may increase from 53 percent to 63 percent in low- and middle-income countries and that at least 24 million children, from preprimary to tertiary-level education worldwide, may never return to school. This, combined with the deskilling effects of prolonged unemployment and underemployment, will likely lower future productivity and earnings in many countries. Further, women suffer disproportionally from joblessness, domestic care burdens, and gender-based violence, as well as from unintended pregnancies and maternal deaths.

This calls for ensuring the adequacy, efficiency, and sustainability of public spending toward human capital outcomes, especially during periods of fiscal tightening such as the current one. High-priority strategic investments would reduce permanent human capital losses and position human capital for economic recovery. Immediate priorities include restoring health, protecting young children from malnutrition and other harm, bringing children back to school and recovering learning losses, and supporting labor income opportunities. In the medium term, sustained economic recovery will hinge on making further progress with universal health coverage, early-childhood development, and learning and skills development; improving the relevance of tertiary education to the labor market; designing adaptive social protections; and emphasizing women’s economic empowerment.

Concurrently, in partnership with the private sector, governments can reimagine service delivery systems in the context of an increasingly digitalizing world. This will involve building digital infrastructure and strengthening institutions for preparedness, coordination, financing, and service delivery. Key areas for systems strengthening include health systems for pandemic preparedness with integrated and people-centered primary health care systems, education service delivery that does not leave disadvantaged children behind, and social protection and labor systems that can adapt nimbly to changing needs and emergent crises.
INVESTING IN HUMAN CAPITAL FOR A RESILIENT RECOVERY: The Role of Public Finance

Strengthening governance will be critical for restoring citizens’ trust and ensuring that spending has the desired impact on human capital outcomes. Studies have shown that merely increasing spending in the education or health sectors does not necessarily translate to better outcomes. What is required is policy prioritization, strong coordination across ministries, agencies, and jurisdictions, and an emphasis on evidence-based policymaking. The management of government budgets and human resources will need to become more outcome-oriented, with an emphasis on accountability for results, and facilitated by digital technologies. Governments can renew the social contract around human capital, restoring the trust of citizens through more transparency and opportunities for citizens’ participation in policymaking and resource allocation.

Securing resources for human capital involves placing human capital outcomes at the center of the budget process and prioritizing expenditures that contribute to human capital accumulation and utilization. Securing resources for human capital priorities can involve finding space within budgets, pursuing cost-effective reforms, and reprogramming budgets toward priorities while shielding critical spending lines from fiscal adjustment. Under fiscal stress and when fiscal adjustments are needed, it is essential to identify and protect those specific budget lines that are critical for the continuation of services that have long-term implications for human capital outcomes.

Raising domestic revenues, debt restructuring and relief, and planning for future crises are all part of this strategy. Countries with long-standing challenges in raising government revenues have six broad strategies that they can use to increase funding for human capital: a) increasing overall revenue collection through the broadening of the tax base; b) improving tax equity where the tax burden rises with the taxpayer’s income or wealth; c) including soft earmarks to provide additional and ringfenced funding streams for human capital investments; d) introducing health taxes to discourage harmful consumption through financial disincentives; e) offering incentives to taxpayers for investing in human capital; and f) using environmental taxes to finance investment in climate-change mitigation and adaptation, while discouraging environmentally damaging activities, and generating health and climate co-benefits. In addition, the increased devolution of education and health spending to local governments highlights the importance of local finances, especially property taxation.

Investments directed toward human capital accumulation and utilization are not only productive but also critical for a green, resilient and inclusive recovery, which calls for mobilizing resources through various saving initiatives and vehicles. COVID-19 hit the world at the same time as the ongoing climate crisis and this combination of two major shocks has been devastating to the poor and the vulnerable. Hence, the collective response to the crisis should aim at a strong recovery that addresses not only COVID-19’s immediate impact but also the longer-term climate crisis. Savings created from the Debt Service Suspension Initiative (DSSI) are already being directed toward supporting the most vulnerable and to sectors contributing to protecting and rebuilding human capital.

Moving forward, debt-restructuring sustainability bonds, sovereign wealth funds, and private funding can all be leveraged to support green investments and the required accompanying human capital investments and reskilling of the workforce. Furthermore, drawing on experience from previous crises as well as the coronavirus pandemic, countries will benefit from proper fiscal planning, risk reduction and preparedness. Adaptive social protection and resilient service delivery systems, for example, can mitigate the impact of crises on human capital, facilitate an efficient fiscal response to them, and drive a strong recovery.
On April 5, 2021, the Spring Meetings Human Capital Project Ministerial Conclave, hosted by the World Bank Group in Washington DC, focused on the sustainable financing of human capital investments. This Approach Paper was prepared to frame the discussion at the meeting and has been revised to reflect contributions from the ministers of finance and planning who joined the discussion. The paper considers the role of public finance for human capital as countries seek to recover from the COVID-19 crisis and lays a foundation for inclusive, resilient and sustainable development.

The paper calls for action toward building and utilizing human capital to promote economic recovery. It defines the problem in relation to human capital outcomes and outlines three areas for action: policy priorities, governance, and fiscal space for building and utilizing human capital. It highlights recent innovations and presents actionable steps for the short term, as well as directions for the longer term, by country context, with the overarching objective of promoting inclusive, resilient and sustainable recovery.

**Chapter 1** takes note of long-standing problems and pre-COVID-19 trends as well as COVID-19’s impact on human capital, and summarizes the underlying financing and institutional impediments to building human capital, including financing adequacy, expenditure efficiency, and service delivery. It underscores the role for public finance by pointing to the role of human capital investments—that is, investments across sectors to build, protect and utilize human capital—in generating positive economic and social externalities.

**Chapter 2** identifies policy priorities across sectors based on evidence-based theories of change for human capital outcomes. It outlines strategies for restoring health, protecting young children, bringing children back to school in order to recover learning losses, and supporting labor income opportunities. Looking at the longer term, the chapter emphasizes universal health coverage, resilient education systems to enhance learning, adaptive social protection, and women’s economic empowerment.

**Chapter 3** outlines institutional approaches to supporting prioritization, addressing trade-offs in government budgets, and raising the efficiency and value for money of government expenditures toward human capital outcomes in the aftermath of the COVID-19 crisis. The chapter emphasizes the vital role of policy and resource coordination across ministries, agencies and levels of government. It calls for adapting budget processes and introducing results-based orientations both in allocating and in managing the human and financial resources of the public sector.

**Chapter 4** looks at revenue mobilization through a human capital lens, recognizing the real-world constraints imposed by fiscal tightening and rising levels of debt. It examines how countries can reprogram budgets, raise domestic revenue, engage in debt restructuring and relief, and plan for future crises while advancing human capital priorities toward a strong recovery.
Chapter 1:
HUMAN CAPITAL FOR RECOVERY AND RESILIENT INCLUSIVE DEVELOPMENT
CHAPTER 1: HUMAN CAPITAL FOR RECOVERY AND RESILIENT INCLUSIVE DEVELOPMENT

KEY MESSAGES
• Human capital is a key driver of growth that comes with substantial positive externalities and builds a rationale for rethinking the role of public finance in human capital investments.
• The COVID-19 pandemic has unleashed a global health emergency and an unprecedented economic crisis, with impacts on multiple fronts from health, education, and nutrition to jobs, gender equity, and socioeconomic equality—impacts that have exacerbated preexisting human capital deficits and threaten to roll back a decade of progress in human capital accumulation.
• By prioritizing human capital investments and improving the efficiency of the underlying delivery systems and institutions, public finance can not only help drive a green, resilient and inclusive recovery from COVID-19 but also provide a foundation for future productivity and growth.

Human capital—the knowledge, skills, and health that people accumulate throughout their lives, enabling them to realize their potential as productive members of society—is critical to the productivity and wellbeing of individuals and communities and to countries’ economic growth. Human capital accounts for two-thirds of total wealth globally and is a key driver of inclusive growth in an increasingly integrated world (Lange, Wodon, and Carey 2018). Countries can accelerate their economic growth, enhance equity, and reduce poverty by building and utilizing human capital in concert with other types of capital investments, and by leveraging a favorable business climate and good governance (Bakker et al. 2020). Healthy and well-educated people, free of poverty, contribute not only to economic growth as productive workers but also bring about a range of other positive social and economic externalities such as social cohesion and environmental protection.

Realizing the full potential of human capital depends on the effective management of the complex interrelationships between human, produced, and natural capital. Human capital, produced capital (including infrastructure, manufacturing and machinery), and natural capital (including oil, gas, coal, minerals, agricultural land, forests, water and protected areas) are interdependent in critical ways. Good jobs translate investments in education and skills into earnings, carbon-free infrastructure generates health benefits, poverty reduction alleviates pressure on marginal lands and natural resources, and improved practices in the meat industry help address climate change and the transmission of zoonotic diseases. Managing this interdependence is a key challenge for this period in history. Solutions include spatial targeting of human capital investments, with programs for economic restructuring such as the transition toward de-carbonization, and structuring human capital investments to ensure the sustainable development and preservation of other forms of capital.

Countries face a range of human capital challenges that predate the COVID-19 crisis, notably long-standing structural human capital deficits, limited financing, and institutional impediments for delivering high-quality, efficient, human capital investments. Globally, the 2020 Human Capital Index (HCI) shows that, before the pandemic, a child could expect to attain an average of 56 percent of his or her potential productivity as a future worker. However, a child born in a low-income country (LIC) could expect to attain only 37 percent. In contrast, for a child born in a high-income country...
(HIC), this figure is 70 percent (Gatti et al. 2021). Similar disparities exist within countries across socioeconomic groups and geographic areas. For example, on average, a Brazilian child today can be expected to achieve 55 percent of his or her productive potential but in the best-performing municipality this increases to 72 percent, on par with the average among HICs, while children in the worst-performing municipality can expect to achieve only 38 percent, again comparable to the average for LICs.

Human capital priorities, and the options available for addressing them, vary across and within countries. Yet strengthening service delivery systems is an imperative in all countries, both for addressing the COVID-19 crisis in the short term and for laying the foundation for a longer-term inclusive, resilient and sustainable recovery. The urgent response to control the spread of the virus and address the impacts of the crisis in order to restore human capital should align with the long-term priorities of human capital development and utilization.

Public finance has a critical role to play in restoring and making productive use of human capital during and beyond the COVID-19 crisis. The crisis has compounded preexisting problems of weak domestic resource mobilization, low levels of human capital investments, high levels of debt, and poor value for money. These problems are particularly acute for lower-income countries where fiscal constraints and human capital deficits are the most severe. Policymakers need to balance saving lives and livelihoods today with laying the groundwork for more equitable, sustainable and resilient future growth.

1.1 The Human Capital Impact of the COVID-19 Crisis

The COVID-19 crisis threatens to reverse a decade of progress in hard-won human capital accumulation. Before COVID-19, advances in human capital, although perhaps not rapid enough to meet many of the Sustainable Development Goal (SDG) targets, had nevertheless been progressing at a steady pace in most of the world. The COVID-19 crisis may result in the loss of a decade of human capital progress, as measured by HCI metrics such as child stunting, learning-adjusted years of schooling, and the probability of survival.

Besides the virus’s devastating direct effects on morbidity and mortality, the COVID-19 crisis poses substantial risks to human capital through several other pathways (WHO 2020a). Key among these is the disruption of essential services, including lifesaving and primary health and nutrition services, childcare, education, and community services. The mitigation measures taken to contain the pandemic have had severe consequences for livelihoods and food security. Supply disruptions have increased the price and reduced the availability of essential commodities, including perishable and nutritious foods. Less visibly, the stress of insecurity, isolation and being quarantined can be causally linked to an increase in depression, domestic violence and abuse. What began as a health pandemic and economic crisis is becoming a financial crisis for many countries, putting growing strain on government budgets for services that are essential to building, protecting and utilizing human capital. The dramatic impacts on human capital include:

- Increased morbidity and mortality. Nine out of ten countries report challenges in maintaining coverage of the most essential services (WHO 2020b), with dramatic consequences for morbidity and mortality that may surpass the direct impacts of the virus itself. In LICs and lower-middle-income countries (LMICs), disruptions in maternal and child health services and access to food could result in close to 2.5 million deaths of mothers and children in one year. Robertson et al. (2020) project up to a 45 percent increase in under-five mortality and a 39 percent increase in maternal mortality per month on average across 118 LICs and middle-income countries (MICs), assuming a six-month disruption in access to core health services and to food. The rise in maternal mortality is driven primarily by the reduced coverage of critical childbirth interventions, while the reduced coverage of antibiotics for pneumonia and neonatal sepsis and of oral rehydration solution for diarrhea is a primary driver for increased child mortality (Robertson et al. 2020). A substantial rise in cases of, and deaths from, infectious diseases other than COVID-19 is also expected, given disruptions in basic primary health services. Deaths from HIV, malaria and tuberculosis are expected to increase by up to 10 percent, 20 percent, and 36 percent, respectively, over the next five years (Hogan et al. 2020). Projections by the WHO...
Chapter 1: HUMAN CAPITAL FOR RECOVERY AND RESILIENT INCLUSIVE DEVELOPMENT

for malaria in Sub-Saharan Africa, based on interruptions in campaigns for insecticide-treated nets, and a 75 percent reduction in access to effective antimalarial medicines, would mean returning to malaria mortality levels not seen in two decades (WHO 2020c).

- **Rising food and nutrition insecurity and malnutrition.** Increases in food prices and disruptions in food supply chains, coupled with health service disruptions and reductions in the incomes of the poor, are contributing to rising hunger, malnutrition, and a record number of people in need of humanitarian assistance (United Nations 2021). COVID-19 may have caused food insecurity in 2020 for almost 100 million people. Phone surveys conducted by the World Bank (n.d.) confirm the widespread impact of COVID-19 on household incomes and food and nutrition security (Pirlea et al. 2020). Rising food prices and disrupted health and nutrition services will likely result in up to an additional 9.3 million wasted and 2.6 million stunted children globally, 168,000 child deaths, 2.1 million cases of maternal anemia, 21 million children born to malnourished women, and US$29.7 billion in future productivity losses as a result of stunting and child mortality (Osendarp et al. 2020).

- **Widespread learning losses.** At the peak of the pandemic, 94 percent of students worldwide were out of school (Gatti et al. 2021 World Bank 2020i). Even by conservative estimates, the resulting learning losses may range from 0.3 to 0.9 quality-adjusted years of schooling—an expected decline from an average of 7.9 to 7.3 years in LICs and MICs, respectively—undoing much of the progress achieved in recent years (Azevedo et al. 2020). Learning poverty, as measured by the percentage of 10-year-olds who cannot read and understand a simple story, could rise from 53 percent before the pandemic to 63 percent. At least 24 million students, from preprimary to tertiary-level education, may never return to school, a substantial increase from the pre-pandemic baseline of at least 258 million out-of-school children. Exacerbating the already large learning inequalities present in many countries is the fact that children from poor and vulnerable backgrounds are more severely impacted by disruptions in access to schooling. In total, children affected by learning losses stand to lose US$10 trillion in future lifetime earnings—equivalent to 8 percent of global GDP (Azevedo et al. 2020). For youth in universities and TVET institutions, the drop in hands-on training, skill certification, and labor market links could reduce their employment opportunities in the future.

- **High global unemployment and income loss.** Jobs have been lost because of the lockdowns. The International Labor Organization (ILO) estimates a global loss of 255 million full-time equivalent jobs in 2020. The subsequent labor income loss before income support is estimated at US$3.7 trillion. Projections for 2021 indicate a continued employment deficit that will translate into 90 million to 130 million full-time equivalent job losses (ILO 2021).

- **Growing inequalities and poverty.** The crisis is exacerbating inequalities and reversing historic declines in poverty. Inequality is widening for women, youth, and low-skilled and informal workers and their families. Estimated global youth employment losses in 2020 amounted to 8.7 percent compared to 3.7 percent for adults aged 25+. In a selection of 50 countries in the second quarter of 2020, the average job loss for low-skilled workers was 10.8 percent compared to 7.5 percent for middle-skilled and 2.5 percent for high-skilled workers (ILO 2021). The pandemic and its response measures have severely impacted the self-employed and households that obtain their income in the informal economy. Further, extreme poverty is expected to increase for the first time in over two decades. Using the extreme poverty rate of US$1.90 a day, the World Bank estimates that COVID-19 raised the number of the extremely poor by 119–124 million in 2020. This number includes 31 million who would have otherwise escaped extreme poverty. Evidence from previous global economic shocks suggests that the COVID-19 crisis is further widening income inequality within countries, given its disproportionate economic effects on lower-income demographic groups (Furceri et al. 2020).

- **Widening gender gaps.** COVID-19 is exacerbating hazards faced by adolescent girls, ranging from increases in school dropout and child marriage rates, to adolescent childbearing and violence. For example, following school closures during the 2014–2016 Ebola crisis,
many girls did not return to school, and teenage pregnancy rates rose. Women and girls suffer disproportionately from domestic care burdens, lack of childcare, and gender-based violence. They are also more vulnerable, given their labor market status (see box 1.1).

• **Without any remediation, COVID-19’s impact could leave an entire generation behind.** The outlook for future employment, productivity, and earnings is sobering. Past experience shows that workers who start looking for a job during a recession experience significant negative impacts on employment and income compared to those with better timing. This “COVID-19 Generation” includes recent graduates, first-time job seekers, and workers who have lost jobs due to the pandemic. They are likely to be scarred from this crisis the longer they are out of work or underemployed. The outlook is further dimmed by the pandemic’s effect on children, which may lead to an irreversible loss in their human capital. Simulated results from the 2020 HCI report show that in 20 years, approximately 46 percent of the workforce in a typical country (people ages 20 to 65) will be composed of individuals who were either in school or under age five during the pandemic (Gatti et al. 2021).

**1.2 The Fiscal Impact of the COVID-19 Crisis**

COVID-19 has triggered a devastating recession with prospects for recovery dependent on the success of containing the virus and the availability of adequate fiscal support. The World Bank estimates a decline of global GDP by 4.3 percent in 2020, which constitutes the most severe global recession since World War II. Acknowledging that prospects remain uncertain, the World Bank projects a recovery for 2021 and 2022 of 4.0 percent and 3.8 percent, respectively. HICs are projected to see a stronger decline and a more subdued recovery. In contrast, the decline in developing economies is likely to be less pronounced and the recovery stronger. It is projected that LICs will experience a decline by 0.9 percent in 2020 and recover in 2021 and 2022 by 3.3 and 5.2 percent, respectively. The prospects of recovery will depend on the successful deployment of vaccines and the enhanced effectiveness of the health response to the pandemic. These prospects also depend on the continuation of fiscal stimulus and monetary easing, especially in developed economies, and of improved financing conditions for developing economies (World Bank 2021b).
Chapter 1: HUMAN CAPITAL FOR RECOVERY AND RESILIENT INCLUSIVE DEVELOPMENT

The fiscal impact of the crisis has been large, leading to widening fiscal deficits and substantial increases in debt (see figure 1.1). The global fiscal deficit soared to 11.8 percent of GDP at the end of 2020, up from 3.8 percent in 2019 (IMF 2021a). The highest increase was in the HICs, with a 2020 deficit of 13.3 percent compared to 3.3 percent a year earlier. This was essentially due to a combination of increases in spending and declines in revenues. In the MICs, the deficit reached 10.3 percent of GDP in 2020, up from 4.8 percent in 2019, and in the LICs it reached 5.7 percent in 2020, up from 4.0 percent in 2019. For both, LICs and MICs, this is explained by a collapse in revenues. Global debt reached 97.6 percent of GDP in 2020, up from 83.5 percent in 2019. Also, with respect to debt levels, the largest increases are in the HICs (123 percent in 2020 against 105 percent in 2019), followed by the MICs (63 percent in 2020 against 54 percent in 2019), and finally the LICs (49 percent in 2020 against 43 percent in 2019) (IMF 2021a). Some countries have just been through a decade of debt accumulation, which raises concerns about a possible financial crisis (Kose et al. 2020).

The unprecedented scale of the fiscal response to the pandemic, however, has helped mitigate the economic and social impact of the crisis. Global fiscal support in 2020 reached US$14 trillion, or 13.5 percent of global GDP. Additional spending and foregone revenues amounted to US$7.8 trillion, or 7.4 percent of GDP, the rest being liquidity support. The latter includes equity injections, loans, asset purchase/debt assumptions, guarantees, and quasi-fiscal operations, mainly to firms but also to households. HICs represent 84 percent of this global support. Of the remaining 16 percent, China represents 6.4 percent (IMF 2021a).

Health-related support, though, has been relatively modest. Of the 13.5 percent of global GDP devoted to the pandemic response, only 1.0 percentage point of GDP (7.4 percent of the total) went to the health sector. In the HICs, within the overall fiscal response of 19 percent of GDP, less than 7 percent went to health. In the MICs, fiscal assistance stood at 5.1 percent of GDP, with health accounting for 6 percent of the total. In the LICs, the overall effort was 1.5 percent of GDP, of which 17 percent went to health. Out of 3,991 COVID-19 fiscal interventions worldwide, only 548 were related to the health sector (14 percent), on both the expenditure and revenue sides. By contrast, 1,884 measures were directed to businesses, 1,372 to households, and 187 were unclassified.

The COVID-19 crisis is already contributing to dramatic budget cuts across sectors, including education. In 65 percent of the LICs and LMICs, and in 33 percent of upper-middle-income countries (UMICs) and HICs, education budgets declined after the onset of the pandemic. These divergent trends may exacerbate the preexisting disparity in education spending across countries (Al-Samarrai et al. 2021).
1.3 The Role of Public Finance in Human Capital Investments for Recovery

Human capital investments have high rates of return and are well-positioned to generate significant positive economic and social externalities. There are strong positive externalities from investments in health systems, particularly primary health, as well as in research and management of zoonotic diseases, pandemic preparedness, and water and sanitation systems. Environmental investments, encompassing sustainable agriculture, food and nutrition security, land management, urban planning, and disaster risk management, are similarly essential for the health of the planet and its residents. For instance, in Jamaica, the Production Incentive Programme was implemented with the aim of increasing and sustaining agricultural production to meet market demand as well as protecting the livelihood of rural farm families and positively impacting national food security (States of Guernsey 2020, 2021).

Early-childhood development, education, and skills development have lifetime and inter-generational benefits, with established impacts on growth, labor income, and equality as well as social cohesion. Investments to strengthen social protection, promote employment, and improve the labor market outcomes of typically underutilized or underpaid groups such as women, youth, and vulnerable populations generate positive economic and social externalities. For example, investing in good-quality, affordable childcare can improve women’s employment, overall productivity, and child outcomes. Government financial support and active labor market programs can reduce the long-term negative effects of the COVID-19 crisis on workers’ future employability and income. Besides support for wage employment, entrepreneurship support for women, youth, and vulnerable populations can further help tap into their often underutilized economic potential. In Bosnia and Herzegovina, the government modified the Guarantee Fund to support the development of entrepreneurship by facilitating prospective entrepreneurs’ access to funds they need for conducting business activities, with a special focus on young and women entrepreneurs (Office of the President, Republic of Srpska 2020).

Sustainable and inclusive recovery from the COVID-19 crisis requires a balance between the prudent phasing out of stimulus packages, especially with a view to protecting the poor and the vulnerable, and increased investments in human, physical and natural capital, aligned with the long-term objectives of inclusion, resilience, sustainability, and more and better jobs. Besides addressing poverty and inequality, well-targeted human capital investments can help spur economic growth and overall business confidence.

In the past, the growth dividends from reform efforts were recognized and anticipated by investors in upgrades to their long-term business expectations and private sector investments. Because many countries will likely tighten their fiscal policies in 2021, the World Bank Group stresses that developing economies “will need to tackle the challenge of avoiding premature fiscal tightening in the short term, but unwinding fiscal support measures and ensuring fiscal sustainability over the medium term” (World Bank 2021b). The IMF (2021a) underscores that fiscal support “needs to be maintained but tailored to the evolution of the pandemic and the economy.” Both institutions recognize the overall economic role of investments in people and call for protecting public spending on human capital. Some countries are already thinking ahead in terms of sustainability of spending. Such is the case with Azerbaijan, where the government has budgeted funds to ensure the sustainability of measures to support employment and social welfare.

The COVID-19 crisis has accelerated structural transformations that can strengthen human capital, advance digital inclusion, and move economies away from carbon-based activities. The crisis is accelerating and shaping profound changes in the factors of production, technologies and norms for the organization of work and service delivery. Public finance can create the right environment for leveraging the private sector (as well as development assistance and remittances) in the expansion, adaptation, and utilization of human capital for the recovery and beyond. As new opportunities arise while others close, human capital is assuming growing importance for resilient and sustainable growth.

---

1 World Bank staff calculations based on data from the IMF (2021a).
2 “Fiscal Policies in Response to the Crisis,” a database constructed by World Bank staff for internal use, last updated in September 2020.
3 The findings of this joint World Bank-UNESCO publication are based on a sample of 29 countries that represent 54 percent of the world’s school-age population. The comparison of pre- and post-COVID budgets looks at differences in budgets prepared before and after the onset of the pandemic in March 2020.
Chapter 2: Public Spending to Build, Protect and Utilize Human Capital
KEY MESSAGES

- An outcome-oriented expenditure framework helps identify a coherent set of pro-poor, high-impact expenditure programs across sectors based on evidence and country contexts.

- To reduce permanent human capital losses due to the COVID-19 crisis, the immediate priorities are to restore health, protect young children from malnutrition and other harm, bring children back to school and recover learning losses, prevent the “scarring” of youth, and support labor income opportunities.

- Further improvements in universal health coverage, early-childhood development, learning, social protection and women’s economic empowerment can contribute to an inclusive, resilient and sustainable recovery.

- Recent innovations and technology can help strengthen service delivery systems.

Restoring and further building human capital amid the COVID-19 pandemic with the aim of making a resilient recovery requires coordinated multisector actions. Governments could use an evidence-based results chain for each human capital priority in order to construct an outcome-oriented expenditure framework and a coherent set of pro-poor, high-impact, multisector expenditure programs. Beyond efforts to control the pandemic with vaccinations and other public health measures, it is necessary to mitigate the risks of permanent human capital loss in the short run and address long-standing structural deficits in human capital accumulation over the medium term. This will require sustained investments and the strengthening of service delivery systems. Recent innovations and technology can give countries opportunities to accelerate their progress in these areas.

Solutions are not as simple as merely allocating more budgetary resources to social sectors. The relationships between public spending and human capital outcomes are not straightforward. The efficiency as well as the adequacy of public spending matter for human capital outcomes (Andrews et al. 2019; World Bank 2003, 2018d; Gottret and Schieber 2006).

An outcome-oriented framework helps determine a coherent set of pro-poor, high-impact expenditure programs across sectors. The right mix of policies and expenditures depends on a country’s human capital priorities and on the alignment of specific policies, programs and expenditures with each selected human capital outcome in a given context (box 2.1).

A multisector theory of change, tailored to a specific human capital outcome, may serve as a guide across sectors. That theory of change can combine global evidence, including impact evaluations, with spatial analysis of outcomes and constraints in each country to support expenditure prioritization at the national and subnational levels. Early-childhood development, for example, may require a different mix of investments in women’s empowerment, nutrition, food security, water, sanitation, pollution control, and safety nets in different local contexts.

Global evidence about effective interventions can inform country choices. A publication by the Global Education Advisory Panel (2020) discusses “best-buy” or “good-buy” interventions based on rigorous
BOX 2.1: IDENTIFYING HUMAN CAPITAL PRIORITIES

Benchmark comparisons of the Human Capital Index (HCI) and the Utilization-Adjusted Human Capital Index (UHCI) can show a country’s relative performance across different dimensions of human capital accumulation and its productive use. Table 2.1 illustrates the HCI and its components for two countries in the same region. The high stunting rate in Country A and poor learning outcomes in Country B both have policy implications.

**TABLE 2.1: ILLUSTRATIVE SCENARIO OF THE HUMAN CAPITAL INDEX IN ONE REGION**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Country A</th>
<th>Country B</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male + Female</td>
<td>Male + Female</td>
<td>Male + Female</td>
</tr>
<tr>
<td>HCI Component 1: Survival</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probability of Survival to Age 5</td>
<td>0.974</td>
<td>0.985</td>
<td>0.982</td>
</tr>
<tr>
<td>HCI Component 2: School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected Years of School</td>
<td>9.7</td>
<td>10.7</td>
<td>12.1</td>
</tr>
<tr>
<td>Harmonized Test Scores</td>
<td>405</td>
<td>377</td>
<td>405</td>
</tr>
<tr>
<td>HCI Component 3: Health</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survival Rate from Age 15 to 60</td>
<td>0.847</td>
<td>0.888</td>
<td>0.862</td>
</tr>
<tr>
<td>Fraction of Children Under 5 Not Stunted</td>
<td>0.533</td>
<td>0.852</td>
<td></td>
</tr>
<tr>
<td>Human Capital Index (HCI) 2020</td>
<td>0.46</td>
<td>0.50</td>
<td>0.56</td>
</tr>
</tbody>
</table>

The HCI is by no means a comprehensive measure of human capital development. While all the components of the HCI are important, there are other important measures that for practical reasons are not included in it. A more systematic assessment could use a lifecycle approach to identify which demographic groups are falling behind and why. A recent World Bank report on Eswatini (World Bank 2020f) adopted this approach to assess the relative needs and potential of people in three phases of their lifecycle: early childhood (from pregnancy to age 5), school age (ages 6–18) and youth to adulthood (19 and older). Among the challenges identified are relatively high infant mortality and child malnutrition because of factors such as a high incidence of teenage pregnancies (30 percent of all pregnancies). Major challenges for school-age children include a high dropout rate at lower-secondary schools, with only 44 percent of children who start grade 1 finishing grade 12. This leads to both truncated learning and other social challenges for adolescents, including a relatively high incidence of teenage pregnancies. About 40 percent of secondary school girls who drop out cite pregnancy as the reason. Reducing the number of secondary school dropouts, especially among female students, emerges as a priority from this analysis.

For a resilient recovery and beyond, the UHCI provides further information to shape policies that make full use of human capital. The UHCI points out the existing gaps in the utilization of human capital to prompt economies to better use the available skills and experience of their workers for increased labor productivity.

Source: World Bank Staff; World Bank 2020f.
evaluations. To improve learning outcomes in countries where schools lack water and electricity, for example, physical investments to create an enabling learning environment, along with funding for qualified teachers, may deliver particularly high impact. To offer another example: Targeted measures to improve the quality of teaching and reduce high school dropout rates among students from poor and socially disadvantaged households may be most impactful in countries that have good infrastructure and staffing.

### 2.2 Restoring Human Capital

**How can countries balance the twin priorities of, on the one hand, mitigating the risks of permanent losses of human capital and, on the other, building and utilizing human capital for economic recovery?**

The immediate priority of controlling the pandemic must be coupled with sustained government efforts to regain health, bring children back to school and recover learning losses, protect young children, prevent the “scarring” of jobseekers, and support labor income opportunities.

**Controlling the pandemic**

Both the restoration of human capital and resilient recovery hinge on addressing the COVID-19 pandemic. This can come only through enhanced disease surveillance (including improvements in data infrastructure, testing and laboratory services, behavior change communication, quarantine and isolation capacity), management of COVID-19 cases, and the rollout of vaccines.

The spending needed to control the pandemic is substantial. The costs of achieving adequate levels of vaccine coverage, it is estimated, will be approximately 2 percent of GDP in LICs and 0.7 percent of GDP in LMICs (Pongsapich and Brimble 1999). Dedicated financing, along with national and international coordination across a wide range of stakeholders, is needed to successfully deploy vaccines. Incomplete coverage would be even more expensive than full coverage: Recent estimates suggest that the unequal allocation of COVID-19 vaccines could cost the global economy up to US$1.2 trillion a year (Hafner et al. 2020).

---

*Source: Investing in the early years for growth and productivity (World Bank 2016).*
**Regaining health**

The immediate challenge is to secure the delivery of essential, pro-poor health services. In LICs, depending on the country, key spending policy imperatives include immunization and child nutrition programs, maternal and reproductive health services, infectious disease control programs, including HIV, tuberculosis, and malaria, and maintaining safe primary health care. In higher-income countries, the focus may shift and expand toward noncommunicable diseases, including catch-up screening programs. All countries need services that mitigate the diseases and conditions that surged during the lock-down period—for example, mental disorders, gender-based domestic violence, and substance abuse—while maintaining access to life-saving medicines and emergency services.

Amid crises, countries may be able to enhance the financial protection of the vulnerable. Possible policy measures include lower copays, exemptions, and caps on out-of-pocket payments, reimbursement of indirect costs of health care (for example, transport), and sick-leave benefits to compensate for health-related income losses. For financial protection as well as effective disease control, several LICs and MICs, including Ethiopia, Indonesia, Papua New Guinea, and Tajikistan, have been offering free COVID-19 services to the entire population (World Bank forthcoming). Others, such as Guernsey (States of Guernsey 2020, 2021) and Brazil (KPMG 2020), have extended paid leave to those who fall sick with COVID-19, while in Bahrain the Ministry of Health decided to shoulder the treatment expenses of COVID-19 patients for all citizens and residents (Ministry of Health, Kingdom of Bahrain 2021). During the 2008–2009 global financial crisis, 12 European countries reduced user fees for outpatient and inpatient care, lowering the cost to consumers of goods and services ranging from outpatient drugs to diagnostic tests. Half of these countries also lowered charges on outpatient drugs or introduced exemptions or caps.

In the medium term, regaining health hinges on reclaiming losses and resuming progress toward universal health coverage. Reversing growing coverage gaps requires expanding entitlements, especially for the poor, unemployed, and agricultural and informal workers. In the wake of previous economic crises, some LICs and MICs doubled down on their investments in universal health coverage programs. For example, during its recovery from the global financial crisis, Mexico expanded the coverage of poor and informal worker households with guaranteed essential health services from 31.1 million people in 2009 to 55.6 million in 2013 (World Bank 2018b); and following the 1997 Asian crisis, Indonesia scaled up such services from nearly zero to more than 10 percent of the population (Pongsapich and Brimble 1999). More recently, in response to COVID-19, Côte d’Ivoire extended three months of universal health coverage premiums to all beneficiaries of financial support through cash transfers (Republic of Madagascar 2020). Higher-income countries also closed population gaps, including for noncitizen residents. For example, during the global financial crisis, Belgium, Bosnia and Herzegovina, and Estonia extended entitlements to the long-term unemployed, while Sweden improved coverage of undocumented migrants and asylum seekers.

**Bringing children back to school and recovering learning losses**

Addressing the education crisis—the “silent pandemic” spurred by the health crisis—requires immediate action. Priority measures involve managing the continuity of education and improving and accelerating learning. Schools need support to meet safety, inclusion, water, sanitation, hygiene, ventilation, and health standards for reopening. Some countries such as North Macedonia have implemented in-kind transfers to provide food and hygiene products to beneficiaries of means-tested programs. Student reenrollment and retention may require the pro-poor provision of school supplies, school-feeding programs, cash-transfer programs with soft conditionality, scholarships, and girls’ empowerment support. In St. Vincent and the Grenadines, the National Insurance Services (NIS) Back to School Voucher Programme provided school-supply vouchers to parents who had been laid off because of COVID-19 and were receiving temporary unemployment benefits (given to both insured formal workers and the self-employed) (National Insurance Services, St. Vincent and the Grenadines 2020). In Zimbabwe, the COVID-19 School Children’s Food Security and Nutrition project provides cash transfers to the most vulnerable families who have children in primary school. Zimbabwe, the COVID-19 School Children’s Food Security and Nutrition project provides cash transfers to the most vulnerable families who have children in primary school.
Many countries are rolling out education-response packages aimed at minimizing learning losses. Here are some examples: Reenrollment and retention campaigns in Madagascar, Ethiopia, and Pakistan focus on girls and students from marginalized communities who are at risk of dropping out. El Salvador combines accelerated-learning recovery programs with an expansion of an early-warning system and home visits to prevent-at-risk youth from dropping out. Uganda has transitioned its cash transfer and mentoring program, “Girls Empowering Girls,” to a virtual mentoring model to ensure delivery continuity and has implemented remote enrollment for preregistered beneficiaries (Kampala Capital City Authority n.d.). School feeding programs in Lao PDR, Madagascar, and other countries are among the efforts to bring students back to school. Reopening schools with class sizes cut in half, and longer school days, are helping the continuity of education in Equatorial Guinea (IMF 2021). A national tutoring program for vulnerable students has been set up in the UK with private sector participation.

In the medium term, forward-looking education policies need to meet future skill needs. This includes redoubling efforts to enroll and reenroll children in school, to expand access to early learning and childcare, and to build literacy, numeracy, and other foundational skills in countries where learning poverty remains a major obstacle to economic inclusion. (Before the pandemic, at least 258 million children and youth of primary- and secondary-school age were out of school worldwide—an underlying structural problem likely to be made worse by the pandemic.) This may remain the priority in most LICs and MICs whose learning trajectories were not on track to achieve reductions in learning poverty even before the pandemic-induced learning losses. Lessons can be gained from successful interventions such as Kenya’s Tusome program which, since 2014, has accelerated learning by providing English and Kiswahili textbooks to all students in grades 1-3, training every lower primary school language teacher on reading pedagogies, and equipping civil society organizations with the tools and skills to support teachers (Wilichowski et al. 2020). At least ten education systems worldwide are participating in the “Accelerator Program” to accelerate learning poverty reduction (World Bank 2020]). Furthermore, all countries can foster skills demanded in the 21st-century labor market—such as socioemotional skills, entrepreneurship, digital skills, and skills for green jobs—by increasing effective cooperation between education providers and private sector employers. Kenya’s FY2020/21 budget includes a new youth employment scheme as part of its stimulus package (IMF 2021b). In Saudi Arabia, the Saudi Human Resources Development Fund announced an increase in support for 100,000 workers through increased training (totaling around US$200 million). The Fund also promotes remote-work tools. Boosting advanced skills and private sector links in tertiary education can help drive innovation and growth and improve the labor market relevance of the programs on offer. Upskilling and reskilling workers for green jobs or for changing livelihoods due to shifting cropping patterns, sea-level rise, and other consequences of environmental degradation can contribute to a greener recovery. The Build Bhutan program aims to provide relief and support recovery through reskilling and provision of jobs to the newly unemployed and, at the same time, address shortages of labor in sectors that previously relied on migrant workers (Phub Gyem and Sonam Pem 2020).

Protecting young children and building a foundation for human capital development

Coordinated investments can mitigate the cumulative adverse impacts of deprivations caused by the COVID-19 crisis. The immediate priority is to prevent severe deprivation such as malnutrition or exposure to toxic stress, and ensure continuity in access to basic health interventions for women and young children, as well as childcare and other strategies to reduce the number of children who spend long periods in unsafe and unstimulating environments while their parents work. For poor households and vulnerable populations, core maternal, reproductive and child health and nutrition services, and early simulation and learning can be effectively complemented with cash transfers to support children, parents, and other caregivers.

Bhutan launched the Druk Gyalpo’s Relief Kidu to support the livelihoods of those affected by the pandemic and provided additional support to families with children. Uzbekistan extended the duration of social allowances for low-income families. In Colombia, the Mis Manos Te Enseñan (My Hands Teach You) Initiative was started on March 20, 2020, the day after early-childhood centers were closed. It targets more than 1.7 million pregnant women and vulnerable children below age 5 through three activities: (i) frequent outreach via phone to check in with families...
on children’s health, nutrition and wellbeing and to suggest activities that parents can do to promote children’s development; (ii) distribution of a learning kit, including a family guide and materials such as paper, paint, chalk and crayons, to enable parents to carry out the activities in the family guide; and (iii) distribution of food baskets.

**Longer-term improvements in early-childhood outcomes require a multisectoral approach.** This would involve using available service delivery infrastructure as platforms for delivering or coordinating multiple services and allowing the same households and children to access complementary services. Many countries use health clinics and community health workers to deliver both nutrition and parenting-focused child stimulation services. This approach enhances child physical and cognitive development as evidenced, for example, by Pakistan’s Lady Health Worker program. Cash-transfer programs can also be used as platforms to target vulnerable families, deliver income support, and leverage investments in children’s development. For extremely poor families in Madagascar, for example, the government has augmented its Vatsin’ankohonana (“family support”) cash-transfer program with training and “nudges” that present behavioral choices to parents in a way that makes them more likely to select those options that will most improve their family health, nutrition practices, the early development of their children, and parenting (Republic of Madagascar 2020). In Mexico, Colombia, Niger and Peru, adding a parenting program to cash transfers has improved child-development outcomes, ranging from cognition and language to socioemotional development, across cases (Arriagada et al. 2018). Senegal introduced a community-based nutrition platform coupled with cash transfers to reduce stunting from 34 percent in 1992 to 17 percent in 2017 (World Bank 2021f). Peru reduced the stunting rate from 28 percent in 2008 to 13 percent in 2016 following a strategy that mobilized national, regional and local governments to address child malnutrition in a coordinated manner (Republic of Madagascar 2005). Indonesia’s National Strategy to Accelerate Stunting Prevention targeted approximately 48 million pregnant mothers and children under 2 within four years. The Government of Rwanda has coordinated investments in social protection, primary health and early-childhood education to boost early-childhood development outcomes, building on a strengthened service delivery platform including birth registration and identification (see box 2.2).

---

**Preventing the scarring of jobseekers and supporting labor income**

The COVID-19 generation of workers, recent graduates, the unemployed, and first-time jobseekers, especially those among low-skilled and more vulnerable workers, are at substantial risk of being scarred. Countries can prevent scarring through several short-term measures. Traditional wage subsidies that support new hiring can be complemented with measures that support employability as well as intermediation services to facilitate job transitions. Technology can boost the implementation of these labor market programs by, for example, minimizing physical contact but also making them more targeted and cost-effective. Resumption and expansion of child- and elderly-care services can support women’s reentry into the labor market. Measures to allow students to stay in school longer and delay their entry into the labor market could also help prevent scarring.

**In the short run, alleviating firms’ cashflow and offering targeted, temporary stimuli can spur overall labor demand.** For example, Pakistan allowed banks to defer clients’ payments on principal loan obligations for up to a year and introduced deferrals on payments for energy. Egypt introduced deferrals on utility payments. In Russia, deferrals on tax payments were granted to the most affected companies during the crisis. Thailand reduced social security contributions of employers and employees from 5 percent to 0.1 percent of wages for 3 months. Ideally, these measures should be targeted to sectors that are labor-intensive or have the potential for future job growth.

**In labor markets characterized by a high degree of informality, assistance needs to reach workers in informal firms.** This is best done through household-level social protection measures that go beyond the extreme poor and include low-income informal workers. In the LICs and MICs, social assistance programs are helping to sustain livelihoods in the recovery and beyond, particularly for informal workers and household enterprises, and especially for female workers and female-headed households. For example, the Government of Argentina provided a lump-sum payment of Ar$10,000 (US$155) to 3.6 million families of informal workers, self-employed, and domestic workers. In Burkina Faso, cash transfers totaling US$10 million (CFAF 5 billion) helped informal retailers, especially women retailers of produce. In Morocco, an electronic cash-transfer program is reaching half of the country’s informal-sector workers.
The Government of Rwanda has leveraged investments in nutrition and child-sensitive social protection, basic education, primary health, and agriculture intensification to boost early-childhood development (ECD). The multisectoral stunting reduction program, which builds on Rwanda’s national ECD strategic plan, focuses on 13 high-priority districts with the highest stunting rates, along with four additional districts with high poverty rates. In these districts, poor families with pregnant women and/or young children below two years old benefit from nutrition-sensitive direct support (NSDS) cash transfers, combined with demand-side incentives, to avail themselves of maternal and child health services.

Concurrently, investments in health facilities seek to improve these services. Poor families also receive an income opportunity to work as caregivers at community-based ECD centers, which provide daycare to the younger children along with knowledge to the parents on basic nutrition, child care, and better parenting practices. Large-scale information and outreach campaigns target all parents and caregivers for behavior change. A modernized civil registration system is being rolled out to boost the registration of births and other vital events through decentralization of the civil registrar function to the head of health facilities, using a digital link to the National ID database and other relevant databases in the country.

Over the medium term, governments, in partnership with the private sector, could boost training programs to meet the demands of the industries of the future and of reskilling workers for jobs in the green economy. In Ireland, for example, an additional €200 million (US$242 million) has been allocated toward investment in training, education, skills development, work-placement schemes, recruitment subsidies, and job search and assistance measures, to help those who have lost their jobs either find new ones, retrain, or develop new skills, especially for emerging growth sectors. In Canada, up to CAD$750 million will be used to create a new Emissions Reduction Fund to support workers and reduce emissions in Canada’s oil-and-gas sector (Government

Source: World Bank Staff

(about 3 million workers). North Macedonia, at the beginning of the pandemic, accelerated the inclusion of the unemployed and workers in the informal economy by providing quick streamlined access to the social protection system through additional cash transfers (International Labour Organization 2020).

Such programs can be phased out at a slower pace than other COVID-19 relief measures. Public works adapted to COVID-19, including innovations such as digital public works, can help stimulate labor demand toward the eventual recovery (Carranza et al. 2020). Uganda expanded the Urban Cash for Work Program to cover new beneficiaries, particularly in areas where many informal-sector workers live (Carranza et al. 2020).
of Canada 2021). In Cambodia, US$64 million has been allocated for wage subsidies and skill training for suspended workers in the garment and the tourism industries.

Meanwhile, the Human Resource Development Council of Mauritius plans to increase their National Training and Reskilling Intake program by approximately 9,000 unemployed people for the construction, manufacturing, logistics, Information and Communication Technology/Business Process Outsourcing (ICT-BPO), agroindustry, renewable energy, and circular economies. Beneficiaries are paid monthly stipends of Rs 10,200 (approximately US$250) over a training period spanning six months (De La Flor et al. 2021).

Women’s economic empowerment can contribute to sustainable recovery. Women’s economic empowerment, in conjunction with girls’ education, family planning, and reproductive and sexual health, can facilitate the transition to low-carbon economies, help improve resource use, and assist in lowering environmental damage and land fragmentation. A focus on women in decision-making and leadership roles, as well as on the type of skills training, employment creation, and entrepreneurship finance needed by the green economy, can help countries avoid recreating the patterns of occupational segregation that characterize fossil-fuel-dependent sectors. New jobs and livelihoods in energy, transport, and agriculture can equalize opportunities.

The expansion of childcare worldwide to meet current needs could create 43 million new jobs (Devercelli and Beaton-Day 2020) and thereby facilitate women’s employment. Efforts to eliminate gender discriminatory laws and regulations can enhance the business environment for female entrepreneurs, as recently seen in Jordan (prohibiting gender-based discrimination in financial services), Pakistan (allowing women to register businesses in the same way as men), and Senegal (enacting new legislation that directly prohibits gender-based discrimination in employment) (World Bank 2021g).

The foregoing are examples of steps and initiatives, typically short- to medium-term, launched by various countries to help restore human capital in response to the coronavirus crisis. However, to enable the targeted recipients to avail themselves of the benefits of these initiatives, service delivery systems need to be created, rethought, or improved. We now turn to these.

2.3 Strengthening Service Delivery Systems

In partnership with the private sector, governments can reimagine service delivery systems in a digital world, integrating them to work best for people across the service delivery spectrum. This would involve building digital infrastructure and strengthening institutions for preparedness, coordination, financing, and service delivery. Key areas for systems strengthening include health systems for pandemic preparedness with integrated and people-centered primary health care systems, education service delivery that does not leave disadvantaged children behind, and social protection and labor systems that can adapt nimbly to changing needs.

Harnessing technology for service delivery

The integration of services and interoperable, linked digital and disruptive technology services can help maximize the benefit of complementary, multisector actions. Data and digital technologies can help governments develop a more nuanced understanding of the different populations they serve, provide new services (for example, digital therapeutics for mental health) and transform the way in which existing human capital-related services are delivered. Data and digital technologies can be empowering by putting the people, families, and communities at the core of, and in charge of, their own human capital formation and protection. For example, in Uzbekistan the government connected the databases of more than 20 ministries and agencies to create a single social registry for efficient household targeting. Brazil similarly created the integrated digital platform SineSaúde (National Employment System-Health) to promote and facilitate the hiring of professionals to improve health-service delivery during and following the pandemic (Government of Brazil 2020).

The adoption of technologies to strengthen service delivery will be possible only with substantial investments. Much of the needed digital infrastructure and technology could be developed by the private sector or through partnerships between governments and the private sector, especially if market-opening and growth-enabling reforms are undertaken. Yet the public sector has a crucial role in closing access and usage gaps. For example, in some remote or rural areas where operations are not commercially viable, governments can subsidize poor households to purchase devices or subscribe to internet services.
Public support can also help people develop digital competencies. Public investments need to incorporate market-based elements to minimize market distortions by, for example, ensuring that sectoral rules promote competition, strengthening state-aid control frameworks, promoting the competitive selection of private partners, and ensuring that consumers have the right to choose better services over inferior ones.

**Public policies need to establish digital safeguards.** Digital safeguards include measures for cybersecurity and data privacy and protection, which build trust in digital systems, processes, and data. It is also critical to ensure that people—especially the elderly, rural populations, or persons with disabilities—are not inadvertently excluded from or compromised in the effort to make digital opportunities available to develop human capital.

These safeguards become more important as advanced technologies, such as artificial intelligence, are used to inform employment or public service delivery and hence should operate in a transparent, nondiscriminatory, and ethical manner (Manyika, Silberg and Presten 2019). This is especially relevant for countries such as Paraguay, Colombia, Togo, Côte d’Ivoire, Niger and other countries where the delivery of cash transfers through electronic payment, mobile money, and digital wallets became common during the pandemic.

**Strong institutions for efficiency and accountability, along with robust regulations, are critical for technological and other innovations aimed at improving service delivery.** As further discussed in Chapter 3, incentives for, and the accountability of, both policy makers and service providers matter for results (World Bank 2003). While the use of technologies facilitates service delivery by reducing the costs of logistics and information and aiding certain accountability arrangements, it is not a full substitute for robust institutions (World Bank 2016b).

**Strengthening health systems and preparedness**

As COVID-19 has demonstrated, sound pandemic preparedness and response is a necessity in building resilient economies. An assessment of pandemic preparedness and response capacity in 49 LICs conducted after the 2013–2016 Ebola outbreak identified more than 5,000 critical capacity gaps (World Bank 2019). The investments required to fill these gaps, it is estimated, amounted to between US$0.50 and US$2.00 per person per year. The COVID-19 experience may encourage countries to view pandemic preparedness as an essential part of health system development and routine planning and budgeting exercises.

If current measures are sustained, many countries will emerge from the pandemic with health systems better prepared to withstand shocks. On the financing side, pre-pandemic investments in mechanisms that limit the likelihood or scale of shocks, in access to contingency and emergency funding, and in solutions to fiscal rigidities have proven important for the response. On the service delivery side, countries fared better in those cases where their governments had prior experience in engaging the private sector. For example, the response in the Democratic Republic of Congo benefited from a long-standing working relationship with a set of certified, trusted suppliers to ensure the delivery of medical supplies, including test kits. During the pandemic, many countries intensified their engagement of the private sector, which, if sustained, will provide critical surge capacity for future shocks. For example, Bosnia and Herzegovina and Nigeria changed licensing and accreditation rules, and Nepal introduced quality standards for private laboratories. Indonesia, Lao PDR, Nepal, and Tajikistan introduced new payment modalities or adjusted existing ones for private sector providers.

Resilient health systems and universal health coverage require fit-for-purpose primary health care equipped with financial and human resource surge capacities to respond to unexpected shocks. They must meet the full range of local health needs, including the priority services discussed earlier to restore health. They require multidisciplinary teams engaged in local surveillance and outreach activities. Such systems coordinate patients’ movements through the health system, build trust-based relationships, and hold themselves accountable for the health outcomes of local communities.

Fit-for-purpose primary health care requires adequate financing combined with some local decision autonomy over prioritization and spending decisions. For example, Rwanda, Burkina Faso and Cambodia expanded their networks of primary health care facilities. Rwanda, Nepal, Malawi, and Ethiopia complemented an increase in the number of training institutions for core health workers with the deployment of community or health extension workers. Thailand and Turkey created strong incentives for health workers...
to practice in underserviced areas. Brazil introduced multidisciplinary teams. China and Kazakhstan are using telemedicine to expand the variety of conditions to be managed in primary health care settings. India and Ghana are strengthening their disease surveillance and related capacities. India is also upgrading its infectious disease hospitals and a network of high-containment biosafety laboratories. Ghana is increasing its coverage of vaccinations, including for climate-sensitive diseases, and raising awareness about critical prevention measures. Saudi Arabia adopted a digital patient “journey map” encompassing digital applications for vaccination, digital confirmation of eligibility for vaccination, immunity certification protocol, and monitoring.

**Building resilient education service delivery**

Education systems that ensure that learning can happen anywhere will be more resilient to future crises. Building such systems requires expanding accessible digital learning platforms at schools, and investing in information systems to track the enrollment and retention of at-risk students and to engage citizens. In a resilient system, teachers need to know how to employ distance-learning platforms and tools to reach students in their households. In Egypt, a wide-reaching education reform that preceded the COVID-19 pandemic helped expand e-learning content to all basic education, strengthened e-assessment, and provided online teacher training, thus making the country’s education system better prepared to deliver remote learning during a crisis. In Jordan and Turkey, the development of TV and digital content for blended teaching and learning, combined with psychosocial counseling and remedial courses, will help reduce interruptions to the educational process in a future crisis (Gatti et al. 2021 World Bank 2020i). Similarly, in Guyana, a television channel for learning at home was expanded and new radio content was created to reach those without easy media access (Akeasha Boodie 2020).

**Education financing mechanisms can mitigate inequality and improve efficiency.** While public investment in education remains inadequate in many LICs and MICs, countries at all levels of economic development struggle to translate public spending into education results. Many countries have covered all or part of the school fees for the most vulnerable in an effort to prevent students from dropping out of school. For example, in Azerbaijan, 50 percent of tuition fees for students from vulnerable families were paid from the state budget during 2020 (ILO 2020).

Financing and accountability mechanisms that emphasize improvements in learning outcomes can help accelerate countries’ learning trajectories. The State of Ceará in Brazil, for example, introduced a funding formula to incentivize municipal governments to improve learning outcomes. Coupled with technical assistance and penalties to municipalities with a higher incidence of students below basic levels of performance, the scheme has achieved remarkable results over the course of a decade without significant increases in public spending in education. Based on the successful experience of Ceará, the federal congress passed legislation in 2020 to scale up this approach to the other states (Lautharte, de Oliveira and Loureiro 2021). Competitively awarded school grants have also been linked to improvements in student-learning outcomes in other countries, including Indonesia and Senegal (Al-Samarrai et al. 2021; Carneiro et al. 2016).

**Strengthening social protection and labor market systems**

**Increasing social protection coverage, responsiveness and adaptability will facilitate resilient, inclusive and green recovery.** Adaptive social protection systems can bolster poor and vulnerable households’ and communities’ resilience to shocks and can prevent nonpoor households from falling into poverty. An adaptive social protection system can dynamically identify people in need of assistance and adjust coverage and benefits in response to changing needs and shocks. Coupled with economic-inclusion and employment programs, it can also advance women’s economic empowerment, facilitate the transition away from fossil fuels, and help prevent habitat degradation (Bowen et al. 2020). For example, Ethiopia’s Productive Safety Net Program uses public works in drought-prone areas to support investments in soil and water conservation and rangeland-management activities, which have reduced household vulnerability and improved carbon sequestration and soil fertility. Similarly, a program in Bhutan is providing cash for work in the tourism sector to provide support to individuals whose economic activity has been hit the hardest in the pandemic (Rinzin 2020).

Social protection can also help build social cohesion and informal risk sharing in communities. Additionally, social protection programs have known impacts on human capital outcomes—supporting access to health services for children, higher rates of school enrollment, progression and completion, better mental health,
and lower engagement in risky behaviors—all elements important for the inclusion agenda.

**The expansion of social protection coverage in response to COVID-19 calls for further system strengthening.** Relative to pre-pandemic levels, cash transfer benefits nearly doubled between 2019 and 2020, and coverage grew by 240 percent, on average, in 41 countries included in an analysis (Gentilini, Almenfi and Dale 2020). Countries with robust social protection systems, such as those with low levels of labor market informality and with a strong unemployment insurance system, have been in a better position to respond to COVID-19. However, pre-pandemic systems in most countries were largely inadequate, with half of the global population without coverage. Retrenchment from the COVID-19 response could again leave many unprotected.

Improved inclusion depends on expanding coverage of basic social assistance, finding ways to cover the informal sector with insurance (possibly via a mix of subsidized premiums and voluntary savings schemes), and, where possible, moving from severance pay to unemployment insurance for the formal sector (Gentilini, Almenfi and Dale 2020). In Georgia, unemployment benefits have been expanded to cover all formal wage workers who lost their jobs owing to the negative impact of COVID-19, and a one-off benefit to cover self-employed and informal workers has been put in place to counter the economic downturn (ILO 2020).

Building an adaptive social protection system requires government investment in digital infrastructure as well as program coordination and responsiveness. An efficient, adaptive social protection system relies on robust service delivery systems including foundational identification, population registers and digital payment systems to respond to a range of shocks. In Brazil, the government launched an online platform to identify individuals who were not initially included in the national social registry. India used its Aadhar foundational identification platform, which reaches 1.3 billion people, to scale up cash transfers, with a strong focus on digital payments. India is also strengthening fiber-optic investments as part of a recovery plan.

Social protection systems need to be dynamic, ensuring timely and adequate responses. The Philippines, already known for well-targeted conditional cash transfers and a strong social registry, still faced challenges in identifying and reaching many of the 18 million families targeted for emergency cash transfers during the pandemic. The government thus accelerated the rollout of its digital national ID system as a basis for expanding financial inclusion, organizing vaccine distribution, and launching future cash-transfer operations. Afghanistan, in response to climate-related disasters, is investing in an early-warning system and in the activation of social protection responses such as cash or food transfers and emergency public works interventions in affected areas. Honduras has created a fund for the Plan for Solidarity Promotion and Reciprocal Assistance (PLAN PRO-SOLIDAR) to facilitate access to essential services and cash transfers to people in vulnerable conditions (De La Flor et al. 2021). In Ukraine, the government introduced an e-service online platform to enable remote registration and remote enrollment in social assistance programs (Olena Tarasiuk 2021).

More ambitious reforms could overcome the segmentation between employment-based social insurance and targeted social assistance transfers that often leave a large “missing middle” of largely informal sector workers without coverage. These solutions are also contingent on ensuring adequate, sustainable financing (Gentilini, Almenfi and Dale 2020).

**Digital technology, skills and regulations for digital jobs can boost labor market resilience.** Many governments have started to regulate alternate work arrangements to adjust to the new reality. For example, the Government of Bolivia introduced telework into the labor code. In Mozambique, the government proposed flexible work schemes for companies and the public administration to allow them to implement teleworking schemes and avoid excessive social contact. The Government of Turkey also urges the private sector to make use of flexible work arrangements. In China, the government is supporting digital platforms to promote employment and alleviate poverty.

In the medium- to long-term, investments in digital capacity, skills, as well as appropriate regulations for platform firms and workers should be a global priority. Companies will invest more in their ability to conduct business over the internet to be more resilient to potential lockdowns. Governments have a key role to play to ensure that digital technology serves all and to overcome the digital gender gap as well as the exclusion of poor communities and households (GSMA 2020).
Chapter 3:
GOVERNANCE TO TRANSLATE FISCAL POLICIES INTO HUMAN CAPITAL OUTCOMES
CHAPTER 3: GOVERNANCE TO TRANSLATE FISCAL POLICIES INTO HUMAN CAPITAL OUTCOMES

KEY MESSAGES

- Achieving human capital outcomes requires policy prioritization, strong coordination across ministries, agencies, and jurisdictions, and an emphasis on evidence-based policymaking. This has been evident especially during the COVID-19 pandemic and will also be the key to recovery.

- The management of government budgets and human resources can benefit from an outcome orientation, with an emphasis on accountability for results, facilitated by digital technologies.

- Governments can renew the social contract around human capital, restoring the trust of citizens through greater transparency and opportunities for citizen participation in policymaking and resource allocation.

C losing policy and resource coordination among key ministries, agencies and levels of government is required to ensure a strategic and programmatic approach to human capital. Countries also need to sharpen decision-making around explicit outcome orientations in both allocating and managing public financial resources. Improving the motivation and productivity of the workforce involved in service delivery, with increased reliance on advancing technologies, is also a primary determinant of the quality of human capital outcomes. Improved financial and human resource management should be backed up with a data-driven, evidence-based approach, enhanced transparency and accountability to gain citizens’ trust, and a monitoring and evaluation (M&E) mechanism to track measurable improvements in human capital outcomes.

3.1 Whole-of-Government Prioritization of Human Capital

Prioritizing human capital in a resource-constrained environment requires a whole-of-government approach to policymaking and implementation. Such an approach is predicated on an explicit political commitment to pursuing a specific set of policy objectives as priorities. Selectivity is key given the high administrative transaction cost inherent in this approach and, more important, the finite political capital of senior government leaders. It entails close policy and resource coordination to avoid duplication and to maximize synergy across government agencies, sectors and levels of government. Evidenced-based policymaking and implementation would facilitate prioritization and accountability for results. This whole-of-government approach has been essential for effective management of the COVID-19 pandemic. In the Republic of Korea, Singapore, and Taiwan, Province of China, for example, crisis response units at the center of government led a coordinated response, drawing on comprehensive real-time information. Such an approach will also be vital for countries to manage the restoration of human capital and for a green and resilient recovery because combating climate change is a similar multisectoral and multijurisdictional challenge.

Driving results from the center of government will require strategic prioritization and evidence-based policymaking in those priority areas. While choosing which policies to pursue and which not is ultimately a political decision, making these trade-offs can be aided by evidence-based decision-making. In some countries, such prioritization is done through formal delivery units typically focused on a few national policies. In others, this is done through dedicated performance-tracking routines within the chief executive’s office. Malaysia’s Performance Management & Delivery Unit (PEMANDU) is a prominent example of the former, while Pakistan...
Punjab’s education-monitoring system under the provincial chief minister is an example of the latter. What these approaches share is focusing political pressure on the main government priorities, establishing an integrated monitoring mechanism, using data to drive analysis, consensus building, monitoring and decision making, and providing a clear signal that government is holding ministers and senior staff to account for delivering on these priorities.

The Punjab monitoring system was key to the chief minister’s ability to drive reforms and helped improve school inputs and expenditure efficiency (Das 2013). Most countries have management information systems for education, health, and social welfare services; but challenges to interoperability and limited management capacity often mean that the potential for these systems to inform human capital policies is underutilized. To build and sustain broad political support for reforms, countries such as Cameroon, the Democratic Republic of Congo, and the Kyrgyz Republic have effectively used a policy dashboard that synthesizes outcome, output, and input data in an integrated manner for decision making and implementation monitoring and, equally importantly, to communicate to citizens.  

Implementing these strategic priorities requires close policy and resource coordination across ministries. While the institutional forms may vary from country to country, the functions that these coordination mechanisms need to fulfill are generally threefold (Pollitt 2003). First, the effectiveness of policymaking for multisectoral objectives such as human capital depends on maximizing the synergies and eliminating the contradictions between different policies. For example, policies to address shortages of rural health workers—a major problem in many LICs and MICs—likely need actions by organizations beyond the ministry of health. For example, the ministry of education may need to prioritize enrolling medical students from rural areas; the ministry of infrastructure may need to provide subsidized public housing for health workers; a ministry or an agency in charge of government-wide personnel policy may need to authorize additional positions and recruitment; and the ministry of finance may need to authorize the required additional budget—and possibly provide financial incentives—for health workers to serve in remote locations (WHO 2010).

Second, better use can be made of limited resources by sharing resources and avoiding duplication between different ministerial budgets. For example, to address the urgent need for surge capacity during the pandemic, Belgium and Estonia redeployed government staff from nonessential to essential functions, which required collaboration between several ministries (OECD 2020). Many countries have also been implementing “one-stop-shop” and “shared services” models in which front offices for multiple government services are co-located, and back-office and administrative functions are pooled and centralized to achieve cost savings and efficiency gains. Finally, policy implementation can be improved through regular tracking of the achievement of interagency goals and resolving bottlenecks in policy implementation.

Improved coordination is even more important in federal systems in which policy functions relevant for human capital are a shared responsibility between central and subnational jurisdictions. In theory, subnational governments are often better placed to deliver social services because of their proximity to citizens. However, decentralized service delivery is institutionally more complex and requires clarity of mandates, clear lines of accountability, and effective resource sharing across the different tiers of government. At the same time, capacities for and commitments to improving a given policy outcome, including human capital, often vary considerably among subnational jurisdictions. These variations often lead to wide disparities in outcomes. Reforms to intergovernmental relations are complicated, long-term and often mired in political economy complexities. However, as a practical immediate step, governments can review the de jure responsibilities of the different tiers of government to check if there is clarity on the core functions necessary for service delivery, and whether there is a shared understanding of these different responsibilities among the key actors. Often, confusion on which department is responsible for what can hurt policy implementation. For example, in four countries in Latin America, local education officials failed to correctly identify between 10 and 80 percent of tasks specified for them in legislation, and incorrectly claimed to have responsibility for 15 to 35 percent of the tasks allocated to other jurisdictions (Adelman et al. forthcoming).
Whole-of-government prioritization of human capital ultimately relies on the incentives and capacities of a vast set of actors through the entire service delivery chain. Leaders, however, do matter and investments in improved coordination structures or better data systems will not have an impact if policy makers are not aligned toward improving human capital. Both political and bureaucratic leadership is essential. In Peru, political leaders used the shock value of high stunting and poor results in the Programme for International Student Assessment (PISA) to mobilize broad support from the public, the business community, and parents for reforms to devise a multisectoral strategy against malnutrition (2008–16) and strengthen teacher accountability (2009–15) (World Bank 2018d).

Politicians also need this goal alignment toward human capital from the senior bureaucrats who are responsible for day-to-day policy implementation. One approach to ensure this alignment is to tie the individual performance goals of senior civil servants to high-level political priorities, and to hold these senior civil servants accountable for the achievement of these targets through greater reliance on performance pay and public accountability. A good example is Rwanda, which used a precolonial tradition of public accountability called Imihigo as a basis for a performance-contracting system for mayors and ministries (Beschel et al. 2018b). The key is to be strategic in the selection of these goals, including those that involve cross-agency collaboration, to avoid information overload and taxing limited capacity.

3.2 Managing Public Finances for Results

Given the fiscal constraints governments face, it is critical that the public financial management (PFM) system be responsive to clearly defined human capital outcomes. PFM systems are meant to create an enabling environment for the effective funding of activities and programs that deliver policy objectives, ensure adequate and sustainable funding of key policy priorities, and create a predictable and timely flow of funds to facilitate efficient service delivery (Barroy et al. 2018). In practice, however, many countries face various PFM challenges that make it difficult for budgets to reflect the needs of the sector and/or for the system to enable efficient service delivery.

Weak alignment between the budget, the needs of the sector, and frontline service providers undermines achievement of desired human capital goals. During budget formulation, line ministries often struggle to produce good-quality budget proposals because of limited costing capabilities and credible information about the needs of the sector. Furthermore, the complexities of matching budgets that require input-based line items to specific sector results can be challenging for line ministries (WHO 2018). The limited involvement of frontline service providers in the planning and budgeting of expenditures also exacerbates the misalignment of the needs of the frontline and the budget allocation. In turn, lack of financial autonomy of frontline spending units effectively makes it all but impossible for the frontline managers to adjust the approved budget to the ground reality.

Effective expenditure prioritization requires sound decision-making processes that reconcile the cost of delivering policy objectives with available resources. Countries with severely limited fiscal space would be forced to pursue a limited set of priorities with a limited range of measures, alongside the rationalization of existing expenditure. In all countries, improving the allocative efficiency of available resources toward human capital outcomes will demand systematic elaboration of how human capital policy objectives can be achieved (strategy), the associated institutional responsibilities, and costing of the associated interventions. Any increases in expenditure will need to be financed, and there may be trade-offs with other planned expenditures. Often, there is significant scope for efficiency gains within existing human capital expenditure allocations—for example, sometimes budgets are allocated but not fully utilized due to implementation bottlenecks. It is important that these are found before looking for financing outside human capital sectors.

Ultimately, budgetary decisions are political, yet they can be better informed through systems and procedures for evidence-based budget decision making. To move toward a more outcome-focused budget, some countries have introduced performance measures and targets into budgeting as a mechanism for informing allocation decisions according to the results they are intended to achieve. This is complemented by strong monitoring and a practice of holding implementers accountable for results. Such budget decision making, however, requires robust data
and can benefit from program evaluations (providing evidence of whether a program is working) and spending reviews (assessing the value of public spending) (Moynihan and Beazley 2016). Use of a program classification can facilitate an outcome focus by more intuitively connecting allocation to outputs and outcomes. When implemented with genuine political will and a focus on achieving a small number of high-priority results, these techniques can have significant impact, as the case of Peru illustrates (box 3.1).

However, outcome-oriented budgeting is technically demanding, and some countries have struggled to use these budgeting techniques to achieve tangible improvements in budget outcomes. Both program budgeting and results-based budgeting can be counterproductive, resulting in overly technocratic procedures and a proliferation of performance targets that distract attention from the ultimate outcome. It is also important to ensure sound accounting for inputs before accounting for outcomes, which requires a strong foundation of PFM basics. Furthermore, there is often a lack of necessary outcome data to inform program budgeting; the data are either not collected or collected too infrequently to make such a budgeting instrument meaningful.

Several examples inform the way in which public spending aimed at achieving human capital objectives can be prioritized. One example is the pro-poor budgeting that accompanied the Poverty Reduction Strategy Papers (PRSPs) during the Heavily Indebted Poor Country (HIPC) Initiative launched in 1996 by the IMF and the World Bank Group. In this case, debt relief in the LICs was linked to the prioritization of poverty-reducing expenditures. Another example is gender-based budgeting (UNIFEM and UNFPA, 2010). In both cases, a detailed

**BOX 3.1: BUDGETING FOR RESULTS IN PERU: AN OUTCOME-ORIENTED, MULTISECTORAL APPROACH TO BUDGETING**

A notable example of an explicit approach to multisectoral budgeting with a clear outcome focus that yielded tangible results is Peru’s success in using its “budgeting for results”—PpR for short in Spanish—to tackle stunting. A succession of four governments placed a high priority on stunting reduction as a national policy goal, mobilized multiple actors at both the national and the regional and local levels, and allocated budgetary resources to pre-identified high-priority interventions. The result was remarkable. In less than a decade, Peru managed to reduce the stunting rate from around 28 percent in 2008 to 13 percent in 2016.

Peru introduced PpR in 2008 to prioritize budgetary allocations and to focus results on five selected policy priorities, including nutrition and maternal and child health. Under the stewardship of the Ministry of Economy and Finance (MEF), relevant interventions for the Articulated Nutrition Budget Program (PAN) were identified and prioritized based on a rigorous review of available scientific evidence. For example, Peru chose to concentrate resources on two vaccines deemed to have the largest impact on reducing chronic malnutrition based on the disease burden in Peru and international evidence. Other priority interventions included improvements in the quality of preventive health and nutrition services at the facility level, reducing iron deficiency among pregnant women and young children, and conditional cash transfers to incentivize household demand for these services. Regional and local governments that managed frontline health facilities were given a financial incentive for increasing the supply of nutrition-related services (Marini et al. 2017).

PpR’s coverage has been limited to a portion of the government budget, initially covering only 5 high-priority budgetary programs, and then expanding to 24 programs accounting for 14 percent of the total budget (IMF 2015). The coverage continued to expand and reached around 50 percent of the health sector budget by 2019 (WHO 2020). It is possible that the limited application to a small number of truly high-priority outcomes facilitated greater strategic focus of both resources and the political attention to achieve the stated policy outcome.

Source: Marini et al. 2017
examination of existing budget classifications is required to identify those items most likely associated with a given outcome across all relevant spending units. Although the absence of a program classification complicates the task, it is still possible to identify a bundle of relevant expenditures by following the example of nutrition expenditure reviews (see, for example, box 3.2).

**Human capital can be prioritized in fiscal rules that govern the budgeting process.** Fiscal rules can take the form of hard numerical limits on aggregates (often with escape clauses), setting boundaries on expenditures that cannot be frequently changed, which during times of austerity can help ensure that human capital-related expenditures are maintained (Reeves et al. 2014). However, such fiscal rules may restrict government’s capacity to respond to new priorities and needs. Fiscal rules can also be softer and specify clear policy intentions and transparency. Clearer policy intentions related to human capital, reflected in medium-term expenditure commitments, can help line ministries to make policy-informed spending decisions over a period, and help ministries of finance better understand the medium-term implications for fiscal policy targets, including human capital investments for overall fiscal targets. Independent fiscal councils, which are increasingly common, can play a crucial role in the oversight and monitoring of government’s compliance with fiscal rules, including expenditure commitments associated with human capital policy intentions (Cangiano et al. 2013).

A medium-term framework can be instrumental in ensuring the predictability and adequacy of budget allocations to policy priorities, including human capital priorities. Traditionally, medium-term fiscal frameworks (MTFFs) and medium-term expenditure frameworks (MTEF) have been promoted as tools to reconcile the cost of achieving human capital and other policy priorities with sustainable macro-fiscal objectives (Marquez and Moreno-Dodson 2013). However, often countries have shown that implementing MTFFs/MTEFs is challenging because the overriding incentive of the budget process is to focus on the forthcoming budget year (Choi and Park 2013). A medium-term estimate of the cost of achieving human capital objectives still has the potential to inform annual spending decisions, but only a few countries have managed to develop MTFFS/MTEFs as reliable tools to secure funding for policy priorities beyond an immediate financial year. If implemented well, medium-term frameworks could be extremely important for financially constrained countries in need of international support (IMF 2021a).

**A challenge to the prioritization of human capital is that infrastructure spending can be politically more attractive than operational spending.** Capital spending on physical infrastructure, whether within social sectors or other sectors, is more visible and thus more politically attractive. This can result in infrastructure that leads to allocative inefficiencies, in the form of either underfunding of the social sectors or accumulation of physical capital which cannot be adequately maintained or sustained. This challenge is

---

**BOX 3.2: NUTRITION-SPECIFIC AND NUTRITION-SENSITIVE INTERVENTIONS AND NUTRITION EXPENDITURE REVIEWS**

The Scaling Up Nutrition (SUN) Movement attempts to identify expenditures that are conducive to achieving nutrition outcomes as either “nutrition-specific” or “nutrition-sensitive” (Ruel, Alderman, and the Maternal and Child Nutrition Study Group 2013). Interventions explicitly intended to improve nutrition outcomes—such as support for exclusive breastfeeding, food fortification, and micronutrient supplementation—are “nutrition-specific.” There is a range of complementary measures—including making nutritious food accessible to all, clean water and sanitation, and maternal and child healthcare—that are labeled as “nutrition-sensitive.” For each of these interventions, it is possible to identify related expenditure items, although in many instances this identification may need to be proximate depending on the level of detail captured in the budget classification system. A similar approach has been proposed to identify expenditures relevant for climate change policies (Bird et al. 2012).

Source: SUN (2020); UNDP/ODI (2012)
further exacerbated by the fact that education and health are, by their nature, labor-intensive services, and by the fact that teacher and health worker pay is often politicized. Sector expenditure can subsequently be dominated by the cost of human resources and capital spending, which squeezes the operational inputs required to run good-quality services and maintain sector infrastructure.

Another challenge is that the current concepts and practices of PFM do not identify the development of human resources as an investment in the accumulation of human capital. Human capital does not exist as a category for public finance. For the PFM frameworks followed by ministries of finance, much of social spending is considered as Current Spending (wages & salaries, goods & services, and maintenance), more akin to consumption. Hence, regardless of the development return on this Current Spending, it is not viewed as investment and is considered less productive than the Capital Spending on infrastructure. Capital Spending is identified with all expenditures that lead to the accumulation of physical fixed assets and equipment.

In short, the human capital approach challenges those traditional boundaries between capital and current expenditures in budgeting (see box 3.3). This approach would reorient policy choices toward identifying and prioritizing specific categories of current spending that contribute to the accumulation of human capital, given how crucial it is for long-term economic and social development (Lange, Wodon and Carey 2018).

Once the budget is aligned to address selected human capital outcomes as priorities and adequate resources are allocated to achieve them, the PFM system needs to deliver reliable resources and facilitate efficient expenditure to local end-users. Bottlenecks to the smooth and speedy implementation of the budget include delayed and unpredictable releases of the approved budget to spending units, cumbersome procurement, and delays in payments to service providers or contractors, sometimes resulting in arrears. This can lead to work stoppage and incomplete delivery of contracted goods and services. Other bottlenecks to be addressed include difficulties in implementing virements, fragmentation of cash balances in the

box 3.3: how human capital accumulation challenges the boundary between current and capital expenditures

Under the current fiscal accounting frameworks followed by ministries of finance, much of social spending is classified as current spending and considered less productive and of lower priority than capital spending. Capturing the accumulation of human capital is difficult under this dichotomy that shapes the guiding principles of fiscal accounting. The dichotomy has practical implications for both annual budgeting and multiyear planning through MTFFs/MTEFs.

To draw parallels between the accumulation and preservation of human capital and the accumulation and preservation of physical capital may require new guiding principles following a revised distinction between “current expenditures” and “capital expenditures”. Such a revision would be in line with both the human capital approach and IMF’s strategy for engagement on social spending. Hence, for expenditures identified as leading to “human capital accumulation”, the salary and wages component as well as associated operating expenses could be considered as part of a “human capital spending” envelope. Indeed, for a road project, the salaries and wages paid to workers are part of the overall “capital spending envelope” that leads to the “accumulation of physical assets”—roads.

Deciding which lines of expenditures, within social sectors and beyond, would contribute to “human capital accumulation”, should follow standardized norms. This can be the case of primary care, vaccination, and nutrition, or primary education. The new thinking and norms may encompass adaptation of the Government Finance Statistics Manual and budget classifications to incorporate the concept of human capital investment into the concepts and practices of fiscal accounting.

Source: World Bank Staff
absence of a treasury single account, and cash rationing practices in ministries of finance. Weaknesses in reporting on expenditure utilization and output delivery compound the problem because this often leads to further tightening of ex ante control at the expense of agility and flexibility.

**Promptly identifying, understanding and removing these bottlenecks requires high-level attention and commitment** because, often, these problems arise from bureaucratic inertia and unnecessarily complex rules and procedures. A wholesale reform of budget execution procedures is usually unrealistic and often unnecessary. The objective can and should be limited to improving execution performance of selected priority programs and services. Similarly, across-the-board relaxation of existing control measures is not recommended when internal controls are weak and the corruption risks are high.

The extent to which a degree of flexibility can be introduced for “de-bottlenecking” for specific expenditures depends on the existing legal and regulatory frameworks that govern budgeting and financial management. In some cases, it is indeed possible to find relatively simple fixes. For example, over the 2014–2016 period, Pakistan’s Ministry of Finance introduced a minor change in the procedure for releasing the approved budget for the government’s flagship cash-transfer program, Benazir Income Support Program (BISP). The result was a drastic improvement in funds flow and an increase in the number of eligible households who received full benefit installments in a given year. Other types of bottlenecks, however, especially those related to procurement, could prove to be more difficult to remove.

**Digital systems can complement these regulatory reforms to improve budget execution.** Treasury single accounts, supported by financial management information systems, can help improve budget credibility and timely payments to service providers and contractors. E-procurement, through greater transparency and audit trails, can reduce corruption and lead to budgetary savings and improved outcomes (Lewis-Faupel et al. 2016). Digital registration, authentication, and payment can reduce leakages in social welfare programs and empower women and marginalized groups, as evidenced in India, Niger, Pakistan, and South Africa (World Bank 2016b).

**Supportive arrangements for facilitating budget execution in a decentralized environment where autonomous subnational governments play a key role are both more complex and less amenable to relatively simple administrative fixes.** Intergovernmental fiscal frameworks need to promote and provide adequate resources for the achievement of national human capital objectives, while providing autonomy for subnational governments to deliver services in line with their own needs and priorities. Clarity in the roles and functions of different levels of government in the pursuit of objectives, and how services are to be financed, is important but often challenging to achieve, given the tensions that typically exist between levels of government.

A predictable flow of intergovernmental transfers is critical, inasmuch as the subnational governments depend on these for service delivery, as is usually the case in highly decentralized systems in the LICs and MICs. For example, Mozambique was concerned about poor education outcomes and the timeliness of the disbursement of school fund grants to primary schools. Through a reform program supported by the World Bank in 2014 (Saleem 2016), a high number of schools received timely school grants for the first time in 2016 and found a positive correlation between access to basic materials and learning outcomes.

**Conditional grants can be one mechanism to encourage subnational governments to achieve national objectives through providing additional fiscal space for that purpose.** While conditional grants are not always tied to outcomes, performance grants can be used to incentivize the performance of local governments, while payments to frontline providers linked to the services they provide have the potential to incentivize improved delivery of high-quality services. This depends on reliable data and, where possible, third-party verification of those results. However, again, it is important that incentives are carefully targeted otherwise they become diffused. Successful examples include the case of the State of Ceará in Brazil mentioned in Chapter 2. Similarly, India’s Finance Commission has recommended that a part of grants to states be tied to the achievement of certain student learning outcomes and improvements in equity (Fifteenth Finance Commission of India 2020).

**Reliable, relevant and timely financial and performance information is more important than**
ever during COVID-19, when policy makers need to make decisions under significant uncertainty. Digital management information systems can provide the granular, real-time information on budgets and performance that is needed for informed decision making, flexible and agile budget execution, and budget transparency. Furthermore, making the reports publicly available in ways in which citizens can easily understand the spending and the results can strengthen oversight, improve policy choices, and ensure accountability. Digital management information systems make budget transparency easier; countries with more advanced systems have greater budget transparency as measured by the Open Budget Index (World Bank 2016b). The challenge is that many countries currently face such tight constraints from the pandemic and from limited prior investment in appropriate technology that they cannot ensure such timely and reliable reporting (World Bank 2020c).

As an integral part of decision making and accountability, a robust M&E framework is needed to monitor progress of human capital. An effective M&E framework that includes an evidence-based theory of change or results framework would aim to evaluate the effectiveness of the budget against defined human capital outcome targets. It could help to strengthen the performance of human capital programs by clarifying objectives and costs, identifying shortcomings in the process, and demonstrating how well the program achieved its objectives and used its resources (OECD 2019). M&E frameworks could also support governments in readjusting priorities as challenges evolve.

3.3 Results-Oriented Workforce Management

Education, health, and nutrition services are labor intensive, and therefore the motivation and productivity of the service delivery workforce is a key determinant of human capital outcomes. Teachers are the most important determinant of student learning outcomes and the difference between a good teacher and a bad teacher can have long-lasting impacts on students’ lives beyond their academics, including on their earnings capacity as adults (Chetty et al. 2012). Improving workforce productivity is also important for fiscal reasons given that the education and health workforce typically comprises 40–50 percent of the total public sector workforce and represents a significant proportion of the government wage bill. These workers generally earn, on average, a wage premium over private sector workers of similar age and skills, but this relatively high pay is only weakly tied to individual performance because teachers and health workers are usually civil servants with job protection and automatic pay increases based on years of service. Furthermore, they are frequently well organized (unionized) and politically influential, and form an important group in reform dynamics, sometimes to the detriment of improving workforce accountability and productivity.

Improving the productivity of the public sector workforce is primarily a management reform that entails selecting individuals that are committed to serving the public and keeping them motivated and accountable on their jobs. In too many LICs and MICs, unfortunately, selection of these essential workers is done based on political affiliation or nepotism rather than merit. There is usually a surge in hiring following elections, and selection is done though highly discretionary and subjective means. As a result of this, for example, a decade ago in Mexico, reforms meant to improve the merit-based selection of teachers through assessments based on a competency examination were opposed by the country’s politically powerful teachers’ union (World Bank 2018d). In India, in 2013, an independent probe uncovered a multibillion-dollar scheme of bribery and cheating involving politicians and bureaucrats that enabled unqualified candidates to gain admission to medical schools. Merit-based recruitment of teachers based on a publicly advertised call for applications, and a rigorous test to screen the most qualified candidates, is a high-priority reform that can improve the quality of service delivery and human capital outcomes.

The quality of management is also associated with higher levels of worker motivation and higher productivity in schools, hospitals, and public administrations. Key management practices include goal setting, how these goals are communicated to staff, the extent of monitoring of the achievement of these goals, the regularity and robustness of performance evaluations, and rewards and recognition. A small but growing empirical management literature on public-sector organizations shows linkages between management quality in schools and hospitals, on the one hand, and student-learning outcomes and the quality of hospital care, on the other (Bloom et al. 2015). Management quality also impacts project completion rates (Rasul et al. 2017).

Chapter 3: GOVERNANCE TO TRANSLATE FISCAL POLICIES INTO HUMAN CAPITAL OUTCOMES
For example, formal teacher recognition and access to professional development opportunities are a key ingredient of the teacher incentive package that has made Shanghai one of the highest-performing education systems. Management quality also matters for administrative staff who play a key role in financing, regulating, and monitoring service-delivery staff. One study, which was based on a survey of 23,000 civil servants across countries in Africa, Asia, Europe, and Latin America, found that higher levels of self-reported performance orientation in public administration (civil servants reporting that performance mattered for promotion and rewards) were correlated with higher levels of self-reported satisfaction and work motivation (Meyer-Sahling et al. 2018).

Digital technologies, combined with sound management, offer low-cost possibilities for improving the accountability and productivity of service providers. Ghost workers and service provider absenteeism are major problems in South Asian and African countries. Nigeria’s implementation of a digital ID system for civil servants enabled it to remove more than 60,000 ghost workers off the government payrolls, saving US$1 billion annually, and providing a return on investment of nearly 20,000 percent in one year (Gelb et al. 2013). Evidence from impact evaluations in Haiti, India, Pakistan, and Uganda shows that digital monitoring can complement sound management in reducing absenteeism (World Bank 2016b). In Pakistan, smartphone-based monitoring of district health supervisors in rural clinics doubled the rate of inspections of health facilities and reduced medical worker absenteeism, but in localities known for the strong influence of patronage politics in teacher management, the results were less encouraging. In India, the digital monitoring of health workers did improve attendance but only in those local governments that used the data to sanction absent workers, which was often difficult because of cumbersome civil service rules or because of political resistance. In Uganda, what reduced absenteeism was combining teacher incentive pay with monitoring technology. In Haiti, the experiment failed because government teachers had not been paid for months and resented the perceived additional unfairness of being digitally monitored on top of that—adding insult to injury, as it were.

Digital technologies can also be an effective motivational tool to keep staff engaged and productive. A regularly conducted mobile phone-based short survey, for example, can be an effective mechanism for engaging staff, eliciting their feedback, and having the type of regular dialogue that research reveals as having a positive impact on staff motivation (Aker et al. 2019). The public sector in general has not adequately leveraged technology for performance management, but many global private sector companies are increasingly using mobile applications to elicit feedback on staff and manager performance (Ewenstein et al. 2016).

These examples underline a more general point that digital technologies offer considerable potential for improving government productivity and achieving human capital outcomes, but only if technology is coupled with “analog complements.” All too often, the considerable investments in e-government systems fail to have the desired impact not because there was something technologically wrong with the system but because enough attention was not paid to the failures on the “analog” side—for example, cumbersome civil service rules and bureaucratic resistance to changes in work practices and cross-agency collaboration. A series of surveys conducted by the Organization for Economic Cooperation and Development (OECD), for example, showed that “analog” workplace practices such as teamwork, autonomy, task discretion, mentoring, training, and incentives were the most important complementary ingredients for effective use of digital technologies in the workplace (OECD/ILo 2017).

COVID-19 has also underlined the importance of these analog complements for building resilient public sector bureaucracies. Recent surveys conducted by the World Bank to assess the impact of COVID-19 on public administrations in six countries found that while three-quarters of the staff had to work remotely during the lockdowns, productivity was constrained by weak digital access, the legal need to submit paper documents, and limited team communication (World Bank 2021a). What is required, in addition to the longer-term investments in improving digital technology, are more immediate reforms such as targeted training on digital skills and greater delegation of decision-making responsibilities to better enable workers to be more productive when working from home.

The private sector, with strong government regulation and oversight, can play a vital role in improving access and the quality of service delivery in resource-constrained environments. Private
schools, clinics, and hospitals are responsible for a significant share of service delivery in the LICs and MICs—for example, roughly 14 percent of primary students in these countries attend private schools, and 41 percent of current health expenditures in LICs are out-of-pocket expenditures (World Bank 2018d; WHO 2021). This underscores the importance of effective government regulation, first, to address problems of asymmetric information and, second, to make it easier for citizens, particularly the poor, to evaluate the quality of the services they are paying for and ensure that the private sector is delivering for all income groups.

Governments can also enter into public-private partnerships (PPPs), such as contracting, which attempts to tackle the problem of weak provider accountability through government financing of the delivery of the services and private sector management of schools and health centers (Patrinos et al. 2009). The logic of the contracting model is that private management increases facility autonomy by relaxing rigid civil service and public financial management rules, and better enables teachers and health personnel to be held to account for delivering results. Evidence from recent impact evaluations in Liberia and Pakistan found that privately managed and publicly financed schools improved access to education and had higher student-learning outcomes, and that these gains were due to better school management rather than the increased enrollment of students from more privileged backgrounds, and were achieved at lower cost (Romero et al. 2020; Barrera-Osorio et al). Governments have to effectively manage PPP contracts to achieve good results by defining and monitoring key performance indicators and being alert to the potentially perverse behaviors of the private providers.

3.4 Transparency, Accountability and Trust

COVID-19 has struck at a time when governments all over the world are confronted by declining citizen trust and legitimacy. Corruption is a daily reality for millions of people who access human capital services, whether through kickbacks for school meal contracts, bribes paid to doctors and nurses for treatment, or in the contracting of pharmaceuticals or textbooks (Anderson et al. 2019). World Values Surveys, for example, show that trust in government has been declining in the OECD countries over the past decade, and several region or country-specific surveys show similar downward trends. In part, this problem of government legitimacy is driven by poor service delivery. For example, in the Middle East and North Africa region, the Gallup World Poll and Arab Barometer surveys reveal a high correlation between citizen satisfaction with services and their perceptions of the pervasiveness of corruption and trust in government (Brixi et al. 2015). Declining trust is also fueled by the expansion of broadband internet that has exponentially increased access to both information and misinformation to citizens. One rigorous study of survey data from more than 840,000 individuals found that an increase in mobile broadband internet access across regions correlated with lower approvals of government, and that declines in government legitimacy associated with the expansion of the internet were greater in countries with more corrupt governments (Guriev et al. forthcoming).

Restoring government trust with citizens will be necessary for a resilient recovery. Trust in government has been critical for effective pandemic response, from citizens abiding by social distancing rules andmasking requirements to their willingness to be vaccinated despite allegations of certain undesirable side effects. It will also be essential for a resilient recovery as trust is both an outcome of effective service delivery and a driver of an engaged citizenry that can demand better services. Low trust impacts human capital outcomes because it leads to a cycle of low performance where poor services and corruption reduce trust in government, which in turn leads to low citizen engagement both in elections and in social accountability forums, and thus little pressure on governments to reform (Brixi et al. 2015). Trust is also important in citizens’ private behaviors and actions that are important for human capital outcomes, such as receptivity to nutritional and hygiene interventions or use of family planning services. Accountability and oversight agencies are critical for transparency and restoring trust in government, particularly given the greater use of streamlined government spending procedures during the pandemic response, which increases the risk of corruption. During the Ebola response, for example, there was widespread abuse of procedures to divert funding from intended purposes (World Bank 2020h). Supreme audit institutions (SAIs) will have a key role.
INVESTING IN HUMAN CAPITAL FOR A RESILIENT RECOVERY: The Role of Public Finance

to play in preserving integrity in spending; maintaining their independence and strengthening their capacity to conduct audits of human capital spending will be priorities. The International Organization of Supreme Audit Institutions (INTOSAI), for example, is focusing on improving its e-learning resources for its members to better enable them to conduct pandemic-related audits (Mona El-Chami 2020).

To restore trust, governments can create institutional spaces for citizen voices, and take the initiative to close the feedback loop. A large body of academic literature on social accountability mechanisms such as citizen and community report cards, citizen feedback portals, and community monitoring of service providers reveals that successful citizen engagement depends on a variety of contextual factors, and that transparency or community mobilization are insufficient to improve service delivery (Fox 2015). Citizens all too often fail to act on the information they receive. Additionally, local community-driven development programs that ostensibly empower communities to participate in local development decision-making are frequently captured by local elites (Mansuri et al. 2013). Two key preconditions for governments to successfully gain the incentive and the capacity to respond to citizen voices are effective partnership between governments and citizens, and secondly, complementarities between bottom-up accountability and internal government accountability mechanisms. Examples: in Uganda, infant mortality was significantly reduced through a local health-sector program that involved a partnership between local governments and communities on health provider monitoring, linked to social rewards and sanctions. Brazilian municipalities that effectively implemented participatory budgeting, in which citizens had direct input into municipal resource allocation decisions, spent more on sanitation and health services, thereby reducing infant mortality rates.

1 These are examples of integrated health dashboards. For the DRC, see https://www.fbprdc.org; for Cameroon https://front.fbrcameroun.org, and for the Kyrgyz Republic http://rbf.med.kg.
2 Simson (2012).
3 A key finding there is that human capital is much larger than many realize, “accounting for roughly two thirds of global wealth,” with its share of overall wealth accumulation increasing even faster in low- and middle-income countries. Indeed, the book states that “in low-income countries, this share increased from 32 percent to 43 percent over two decades, consistent with the growth path discussed earlier in which development occurs by increasing investments in human and produced capital. In lower middle-income countries, it rose from 44% to 52%” (p. 15).
4 The “fix” involved applying the budget release procedure for the “regular” budget, including civil servant salaries, allowing the Benazir Income Support Programme (BISP) to receive the annual appropriation in four equal automatic installments per quarter rather than having to seek authorization for a release of a specific amount against an expenditure report, following the procedure applied to the “development” budget (World Bank 2014).
5 World Bank staff calculations based on EU SILC and LABLAC data.
Chapter 4: SECURING RESOURCES FOR HUMAN CAPITAL PRIORITIES
CHAPTER 4: SECURING RESOURCES FOR HUMAN CAPITAL PRIORITIES

KEY MESSAGES

• Immediate fiscal pressures imposed by the COVID-19 crisis call for protecting resources for human capital priorities, especially in financially constrained low-income countries.

• Over the medium term, domestic resource mobilization will be a primary source of human capital investments and of a resilient recovery.

• It is important that governments review budgets across and within sectors to cut unproductive expenditures and strengthen fiscal resilience.

Where fiscal positions are stretched, securing resources for human capital priorities involves shielding critical budget lines from fiscal consolidation in the short term. Over the medium term, it will require finding space within budgets that are pursuing cost-effective reforms, and reprogramming budgets toward priorities. For countries that have challenges in raising government revenue, the crisis has heightened the importance of mobilizing domestic resources over the medium term, and raising the level of governmental commitment to human capital outcomes will be a crucial step. While most HICs and MICs may be able to continue to borrow to provide fiscal stimulus, many LICs may require debt restructuring to stabilize their debt servicing, along with continuous international support to protect core human capital expenditures. Finally, drawing on the experience of previous crises, improved financial resilience throughout the public sector will facilitate continuity of top-priority programs.

A granular approach to fiscal adjustment would focus on the role of specific spending categories for the efficiency of a specific sector and its overall medium- to long-term social returns. Beyond the distinction between capital and current spending, it is necessary that while adjusting, countries protect in the short term those categories of spending that have critical impact on service delivery and long-term economic and social development. These categories of spending have several characteristics: They (1) are critical for the operation of sectors (internal efficiency) and for the continuation of service delivery (social returns); (2) often have a relatively low amount of funds; and (3) are much easier to reduce, cut and constrain than the more politically sensitive wages and subsidies. Instead of cutting these essential expenditures, a negotiated and temporary freeze of the payroll might be more desirable, in the short term. As governments approach the recovery phase, they are likely to scale down emergency expenditures, including COVID-19 health-related spending, hence the need to create fiscal space for preserving critical categories of social spending.

4.1 Protecting Resources for Human Capital during the Crisis

Fiscal imbalances linked to the COVID-19 shock will entail adjustments, making it crucial to protect spending that supports human capital and long-term development. With the COVID-19 shock leading to massive fiscal imbalances and debt accumulation, inevitably countries will have to undertake fiscal adjustment measures. The main argument in favor of fiscal adjustment is that restoring fiscal balances contributes to increasing savings and investments, hence promoting long-term growth (IMF 1995). In parallel, it will be essential to ensure the continuity of public services and support the most vulnerable part of society (Loayza et al. 2020). Consequently, it is crucial to reconcile the drive for an adjustment that preserves output and restores investment and long-term growth with the concerns of preserving and restoring human capital, especially now that the causality between the two is well established (see box 4.1). This is particularly relevant for financially constrained LICs, where fiscal space is already narrow and substantial human capital shortfalls and equity gaps existed even before the crisis.
In many sectors, the easiest budget items to cut are often critical for the continuation of services, and defunding them could have immediate and long-term implications on human capital outcomes. Those lines are often related to the provision of inputs and maintenance. In many countries, resources have been reallocated in favor of COVID-19-related spending at the expense of other essential health spending. For instance, while overall health spending has increased, there is evidence of decreased efforts to control malaria during the COVID-19 pandemic (UN 2020). Cases of defunding of lines related to vaccination have also been reported, with lasting, long-term, generational health impact and damage...
to human capital. The situation is likely to become catastrophic in countries with weak financial and institutional capacities. Moving forward, it would be harmful if fiscal adjustments lead to a reduction in nonpersonnel recurrent spending (such as for routine maintenance, teaching and learning supplies, and professional development). Although these budgets tend to be relatively low, these items are critical to restoring sectors’ efficiency.

Governments could explore adjustment options that protect expenditures that are critical for compensating human capital losses and that provide a foundation for long-term development. These expenditures, identified in Chapter 2, aim to mitigate the risk of permanent human capital losses. They include immunization, nutrition, water and sanitation. Governments must identify sectors to be protected and, within these sectors, the most critical budget lines with the highest developmental impact. Budget management frameworks are needed to identify and prioritize budget allocations across and within sectors, as well as for the operationalization of a “socially sensible” fiscal adjustment. The standardization of budget frameworks, and the existence of analytical tools such as the World Bank’s BOOST Public Expenditure Database, make it possible to create frameworks for the identification of human capital budget lines and to move toward human capital development-based budgeting.

Clear planning and program classifications within the budget can enable better understanding across sectors of the impact of spending changes on results beyond the current year. Governments with MTFFs are better positioned to assess the out-year knock-on effects of current year spending reductions or higher taxes, and their macroeconomic and social incidence and consequences. Where medium-term perspectives exist in a sector such as health—where linkages between resources, outputs and outcomes are more clearly elucidated—it is far easier to gauge the multiyear impact of present fiscal choices to reduce spending. MTEFs are the natural complement to MTFFs. MTEFs can be applied at central and subnational government levels and within sectors to inform budgets and program classifications. This would enable a better understanding of linkages between inputs and outcomes, with the goal of improving the impact of spending on achieving national objectives.

4.2 Mobilizing Domestic Resources through a Human Capital Lens

Domestic resources are a primary source for driving a resilient recovery over the medium term, but options for domestic revenue mobilization will vary greatly across country contexts. The basic components for building human capital cost around 2.7 percent of GDP in the LICs, with a more comprehensive coverage estimated at about 11.5 percent of GDP (World Bank 2018c). To aid recovery from the economic fallout of COVID-19, the IMF calls tax reforms “a key element” in promoting inclusive growth and suggests that MTFFs could include addressing weaknesses in tax systems in their focus on restoring space for action in indebted countries (IMF 2021a).

Countries can be grouped into four types based on their level of revenue collection and human capital expenditures: (1) Countries that underperform on revenue collection while also underspending on human capital: these countries tend to fall short of the 15-percent-of-GDP rule of thumb for governments to sustain minimum service delivery; (2) countries with significant revenues but limited spending on human capital: these include mostly resource-rich economies; (3) countries with high investments in human capital and high revenue: these are mostly countries with established formal-sector economies and tax revenues above 15 percent of GDP; and (4) countries that make high investments in human capital as a share of public spending but do relatively poorly on revenue mobilization: these include countries where limited domestic resource mobilization (DRM) constrains the effectiveness of investing in human capital.

The countries in the first and fourth groups are where DRM is most salient in determining the funding of human capital investments. These encompass most of the world’s poorest countries, many of which are also fragile states. In these countries, improvements in DRM are more likely to lead to an increase in human capital investments. These improvements should be done in a fair and
Chapter 4: SECURING RESOURCES FOR HUMAN CAPITAL PRIORITIES

Governments could consider several options to adapt the DRM system in favor of human capital:
(1) Increasing overall revenue collection through broadening the tax base; (2) Improving tax equity; (3) Including soft earmarks to provide an additional and ring-fenced funding stream for human capital investments; (4) Introducing health taxes as financial disincentives to discourage harmful kinds of consumption; (5) Offering incentives to taxpayers for investing in human capital; and (6) Introducing environmental taxes that generate health and climate co-benefits.

1. Increasing overall revenue collection through the broadening of the tax base. The reasons for low tax collection are related to tax policy and administration challenges, including tax expenditures such as exclusions, exemptions, deductions, tax credits, tax holidays, preferential tax rates, and deferrals which all lead to revenue losses. In many countries, these significantly limit resource mobilization. In Africa, for example, country-level estimates of the cost of tax expenditures range from 2 percent to 7 percent of GDP (Choi, Dutz and Usman 2020). In some countries, such as India, reduction of exemptions is a key element of their DRM strategy (see box 4.2). While exemptions have negative implications for the fairness, efficiency, and effectiveness of tax regimes, they are not a key criterion for investment decisions. Although tax reforms are generally a medium-term agenda, a revision of tax expenditures often offers room for quick gains. In the medium term, it is important to situate and reorient tax system reforms that support the government’s projections of spending needs, including human capital investments (see box 4.2).

2. Improving tax equity. A more equitable tax system is a medium-term objective that can promote human capital by (1) easing the tax burden on the poor by increasing their after-tax disposable income; and (2) reducing evasion, avoidance, and certain favorable tax treatments. These two strategies may help increase private and public funding of human capital, respectively. Regressive taxes typically include turnover taxes, sales taxes, and certain excise and customs duties. Countries should consider lowering sales tax rates and import duties on food and other necessities and moving toward more progressive personal income tax systems. On the international front, fighting tax evasion and tax avoidance, including illicit financial flows, will be key. Also, better use of property taxes and inheritance taxes helps.

3. Including soft earmarks. It may be worthwhile to earmark taxes to help fund specific human capital investments. Historically, public-finance practitioners have been less than enthusiastic about earmarking—linking specific revenue with a specific expenditure—because it can undermine the general efficiency of the public budgeting process. But recent evidence has shown that soft earmarking can work, especially in addressing political economy constraints where entrenched interests oppose reform, such as the case of tobacco taxation (Kaiser et al. 2016).

4. Instituting health taxes. Health taxes, or excise taxes levied on harmful products that lead to a decrease in human capital, aim at changing behavior and offer a chance to simultaneously increase healthy outcomes and invest in human capital. Health taxes are also a way to discourage individuals from using harmful products without making the products illegal.6

The behavioral impact of health taxes is the most evident with health taxes that improve population health through reduced consumption of unhealthy products. More than 10 million premature deaths each year—about 16 percent of all deaths in the world—could be prevented if the consumption of tobacco, alcohol, or sugar-sweetened beverages were reduced.7 Excessive consumption of unhealthy products is persistent, or even increasing, in many LICs and MICs and contributes to deaths from noncommunicable diseases, half of which occur prematurely before age 70. While this remains above all a human tragedy, it also has economic consequences since people are often cut off during their peak productivity years, preventing countries and households from reaping the full returns on human capital investments. Excise taxation is a cost-effective policy measure to reduce the consumption of these products. Indeed, a 20 percent price increase of these products at current consumption levels would lead to health gains in terms of life years over 50 years in the LICs and MICs (Summan et al. 2020).
BOX 4.2: MEDIUM-TERM REVENUE STRATEGIES (MTRS)

A Medium-Term Revenue Strategy (MTRS) is a process of implementation of tax system reform over time which aims to achieve a social contract in the country on revenue mobilization goals, a comprehensive reform plan for the tax system, domestic political commitment for sustained implementation of the reform plan, and secured support for capacity development to overcome constraints in developing and implementing the MTRS. (Platform for Collaboration on Tax 2019)

An MTRS (1) sets the revenue mobilization target based on envisaged high-priority public expenditures; (2) designs a comprehensive tax system reform, covering policy, administration, and the legal framework; (3) commits steady political support to the reforms; and (4) secures adequate resources domestically and from donors to support reform implementation and ensure efficiency through coordinated effort.

Country-led and country-owned Integrated National Financing Frameworks (INFFs) help mobilize and manage financial and other means of implementation in support of sustainable national development strategies. INFFs help policy makers map the landscape for sustainable financing of development. They lay out a strategy to increase investment for development, make the most effective use of it, coordinate technical and financial cooperation, manage financial and nonfinancial risks, and ultimately achieve the priorities articulated in the national development strategy.

Source: World Bank Staff

Health taxes result in healthier populations and can generate significant revenues for the budget even in challenging tax administration and low-capacity environments. For example, between 2012 and 2016, the Philippines used increased revenue from reforming the tax structures and increasing rates on alcohol and tobacco taxes to triple the budget for the Department of Health and triple the share of its population that had health insurance (Ozer et al. 2020). Moreover, country studies indicate that excise taxes for improving health outcomes are progressive over the long term (Fuchs et al. 2019).

Some conditions associated with the consumption of unhealthy products are emerging as independent risk factors for COVID-19 (smoking and obesity). Health taxes can improve health outcomes and, in the short term, could decrease the societal impact of future COVID-19 waves. Reductions in conditions associated with excessive consumption of unhealthy products will also relieve overburdened health care systems and assist in system-wide recovery from the pandemic.

5. Incentives to taxpayers for investing in human capital. Government tax policies can orient citizens’ human capital investments. For example, to address gaps between men and women in labor force participation, Poland used tax credits for childcare to encourage mothers to rejoin the labor force, while Turkey provided tax credits to childcare providers to increase the supply of childcare centers.

6. Environmental taxes. Over the medium term, revenues generated by Environmental Tax Reform (ETR) can be used to reduce other preexisting taxes or to finance spending on health, education, and social protection. They can finance investment in climate-change mitigation and adaptation, offset the social impact of other forms of pollution, and accelerate the transition toward safer, more efficient infrastructure and cleaner technologies. Moreover, ETR is a cost-effective means of reducing carbon emissions and local pollution; it leverages market mechanisms, sending price signals that discourage the burning of fossil fuels and other environmentally damaging activities while promoting innovation and investment in cleaner, more efficient sources of energy; and it generates health and climate co-benefits (see box 4.4).

Finally, the increased devolution of human capital-related spending powers, essentially education and health, to local governments around the world
Chapter 4: SECURING RESOURCES FOR HUMAN CAPITAL PRIORITIES

4.3 Finding Space within Budgets

Governments can review budgets across and within sectors to cut unproductive expenditures and secure financing for human capital and accelerating recovery. Building or reinstating resilient and inclusive service delivery systems in the areas of health, education, and social protection will involve a comprehensive review of budget allocation and careful prioritization. It will also involve reviewing financing within sectoral budgets and engaging in intrasectoral reallocations to move funding away from less effective programs toward investments that are more likely to improve high-priority sector outcomes.

Lowering energy subsidies is a good example of how regressive spending that once promoted the inefficient use of fossil fuels—with negative consequences for both the environment and health—can be redirected to serve people. Energy subsidies, estimated at 0.6 percent of GDP on average globally,\(^9\) drive the overuse of fossil fuels and crowd out public spending in other sectors, including high-priority areas such as education, health and social protection. Additionally, in many countries, energy subsidies tend to be regressive: they, disproportionately

---

BOX 4.3: ENVIRONMENT TAX REFORMS: SETTING THE STAGE FOR A GREEN RECOVERY

By discouraging pollution-intensive activities, environmental taxation can promote improvements in air quality and public health. Moreover, the growth benefits of Environmental Tax Reform (ETR) are more pronounced in economic activity in developing countries—for example, output and employment. This is due to several features common to these countries, especially (i) large informal sectors, which create opportunities to increase employment and output by using ETR revenues to reduce formal-sector taxes; (ii) inefficient tax systems, which create opportunities for ETR to reduce tax distortions, broaden the tax base, and generate tax rents rather than profits; and (iii) low levels of domestic taxation, which create opportunities for ETR to mobilize domestic resources to fund growth-enhancing public investment.

Despite the numerous benefits of ETR, public support for it tends to be low because of the concentration of costs among certain classes of firms and consumers. By contrast, the benefits of ETR are diffused throughout society, making opposition to ETR easier to mobilize than support. Addressing the lack of public support is therefore critical to ensuring ETR is implemented and sustained. For instance, ensuring that compensation mechanisms are in place before the reform takes effect can help defuse opposition. For example, the Iranian government transferred funds to dedicated bank accounts to compensate citizens before raising energy costs and released these accounts on the date of the reform. Strategies such as these can help policy makers build and sustain support for ETR.

Source: Adapted from Pigato (2019)
Lowering energy subsidies has a direct impact by creating fiscal space for human capital spending and generating large co-benefits, including the reduction of climate risks. As demonstrated by Egypt and Indonesia (see box 4.4), lowering energy subsidies can create the fiscal space for pro-poor and human capital spending. Social safety nets are needed to protect lower-income households from energy price increases and assist all those adversely affected by a transition to decarbonization. Policy makers can increase public spending on policies that disproportionately benefit the poor, such as housing support or public health care. Moreover, higher energy prices discourage pollution-intensive activities, improve air quality and public health, alleviate traffic congestion, and reduce the frequency of road accidents. Removing subsidies, developing social safety nets, and investing in human capital are excellent policy choices in a post-COVID-19 world. These reforms are green because they enable reduced carbon use, resilient in that they enhance sustainability, efficiency, and the progressivity of public finances, and inclusive because they are pro-poor.

Higher energy prices could also make it harder for domestic firms in emerging markets to compete in both foreign and domestic markets, especially in energy-intensive tradable sectors. However, in many countries, energy represents a relatively small share of production costs, and while it is fundamental for energy-intensive producers, for most industries, energy cost is just one of the many factors that determine their competitiveness. Moreover, competitiveness losses for some types of firms or sectors may be more than offset by the gains reaped by those who benefit from the redeployment of resources.

Where it is not possible to make intersectoral budget adjustments, reallocations within sectoral budgets can protect frontline services. In these cases, it will be critical to prioritize existing funds to cover the additional costs associated with the pandemic response, and to minimize disruptions to the quality of services. This might involve postponing expansion plans, reducing other planned capital investments, reducing training and supervision budgets, or temporarily shifting resources from nonessential services to the frontlines. However, any reallocations would need to be carefully assessed to ensure that

**BOX 4.4: EGYPT AND INDONESIA: TWO CASES OF PROGRESSIVE ENERGY SUBSIDY REFORMS**

Egypt successfully reduced fossil fuel subsidies, which were 7 percent of GDP in 2013/14, to 2.7 percent of GDP in 2016/17. The Egyptian government used the fiscal space to roll out cash-transfer programs, expand school lunch programs, and reallocate resources to health and education which, in FY2015, outstripped spending on energy subsidies for the first time (ESMAP 2017). When the pandemic hit, the country had the fiscal space needed to enhance health spending. The country also managed to expand the social safety net, with a particular focus on women.

In late 2014, Indonesia used the window of opportunity created by a sharp fall in global oil prices to shift fiscal priorities away from untargeted energy subsidies toward targeted transfers and health investments. As a result, energy subsidies dropped from 3.2 percent of GDP in 2014 to 1 percent of GDP in 2015. By 2017, spending on energy subsidies had declined to US$7.3 billion from US$28.9 billion in 2014, while health spending reached US$8 billion compared to US$5 billion in 2014, and infrastructure spending hit US$30.1 billion, up from US$13.1 billion three years earlier (Republic of Indonesia 2019).

Beyond subsidies, Indonesia is aiming to build consistent signaling in terms of carbon pricing while protecting the segments of the society that most need support to face the increase in energy prices. This has involved reforms to their safety net, including the use of digital technology to identify the poor.

The resources required to recover from COVID-19 crisis and the need to meet the Paris Agreement and address environmental degradation challenges, prompt a serious reassessment of energy subsidies.

Source: World Bank Staff
they do not reduce current levels of access or standards of quality.

The private sector can be a source of funding of human capital as well as a provider of human capital-related services. Mobilizing Finance for Development, a World Bank initiative, is based on the fundamental assumption that government budgets will cover only part of the resources needed to finance development. In many countries, the private sector can invest in areas that impact long-term growth and development if business reforms are implemented and appropriate risk mitigation instruments are deployed to address the shortcomings of the investment climate. Moreover, in specific segments, namely where the public sector lacks the capacity to deploy and where the for-profit private sector has no interest in investing, social enterprises (SEs) can fill the service delivery gaps, especially in the LICs. Adapted procurement approaches that emphasize environmental and social dimensions can promote the involvement of SEs. Combined with results-based financing (RBF), social procurement and the involvement of SEs can enhance the focus on social and economic results and contribute to developing human capital.

### 4.4 Borrowing, Debt Management and International Support for Human Capital Priorities

The pandemic has accelerated a global “fourth wave” of debt buildup, which calls for actions to stabilize debt while protecting human capital spending. As mentioned in Chapter 1, many countries are highly indebted and financially constrained. The stock of public external debt for developing countries was estimated at US$31 trillion, or 26 percent of GNI, at end-2019, with large disparities between regions: 47 percent in Europe and central Asia versus 18 percent in East Asia and Pacific (World Bank 2020e). Debt service for 2021 and 2022 is estimated at respectively US$356 billion and US$329 billion (Kharas et al. 2020). Of these, Debt Service Suspension Initiative (DSSI) countries would have to repay US$24 billion in interest and US$66 billion in principle. In parallel, as of end-2020, DSSI agreements have covered US$5 billion in 40 eligible countries.

Commercial and official bilateral creditors need to be engaged to prevent extreme periods of fiscal austerity that can lead to erosions of human capital. The IMF (2020) has issued recommendations on debt management that focus on how to “cushion a liquidity shock.” Where debt restructurings prove necessary, both creditors and debtors should aim for ambitious restructurings that lead to permanent solutions (Kose et al. 2021). Kharas et al. propose a debt-resolution framework with several options, including one where even a highly indebted country would still receive external financing provided it has a “set of environmentally sustainable and socially inclusive policies in place to ensure that economic growth is actually benefitting its people” (Kharas et al. 2020). In November 2020, the G20 approved an extension of the DSSI to June 30, 2021 and put in place a Common Framework for Debt Treatment beyond the DSSI and on a case-by-case basis. In February 2021, the G20 reaffirmed their support for vulnerable countries facing an unsustainable debt burden, and their commitment to the implementation of the Common Framework and DSSI. On April 7, 2021, G20 bilateral official creditors agreed to a final extension of the DSSI by 6 months through end-December 2021.

Beyond the pandemic, identifying parts of spending as long-term investments in human capital accumulation would change the approach to mobilizing resources in favor of the concerned sectors, including through debt. If spending on social sectors and beyond is, at least partially, an investment in the accumulation of human capital as additional productive capacity, then devoting savings to this spending becomes an important goal. Hence the rationale behind directing DSSI savings toward preserving social spending and human capital during the crisis. Beyond the crisis, capital markets are gaining importance as a source of funding to combat climate change and achieve social goals, and they can play a crucial role in greening the recovery. Some countries, such as Indonesia, are innovating on green financing by issuing green bonds both domestically and globally. Indonesia is also using its environmental agency for environmental fund management to mobilize and use funding from philanthropy, multilateral development banks, and domestic resources. Possibly related to efforts to fight the pandemic, social bond issuance in 2020 increased substantially; and sustainable debt issuance, at more than US$650 billion, is set to surpass the 2019 record (IMF 2021c).
Mobilizing domestic or foreign savings for human capital investments is beneficial to both the public and private sectors and society at large. Borrowing for the social sector should no longer be thought of as unproductive or crowding out private investment. Rather, such borrowing can now be considered as an investment with a long-term return that should be compared to the cost of borrowing, and this return can be estimated using models and tools (see box 4.1). Countries’ medium-term debt management strategies (MTDSs) spell out financing strategies, and countries in their strategies could consider the use of sustainability and social bonds if debt sustainability considerations allow and they have access to markets. The MTDS is aligned with the MTFF macrofiscal framework and links “borrowing with macroeconomic policy” (World Bank 2021d). The concept of human capital and streamlining it within MTFFs imply a key role of human capital in impacting growth and gives human capital spending a macrocritical dimension (IMF 2019).

International support for human capital during and beyond the COVID-19 crisis remains key, especially for LICs and, specifically, for the most fragile among them. LICs will still require sustained and substantial international support to preserve and develop their human capital. In those countries, the size of the economy is often so small that ratios to GDP are of little relevance to assess needs or the sufficiency of resources, even to reach the minimums. If these countries were to take charge of the minimum spending required for their human capital, they would structurally fall short of having the necessary resources even if they were to increase their DRM to the 15-percent-of-GDP threshold and beyond (see box 4.5). Moreover, such countries often lack access to financial markets at reasonable cost and rely on concessional borrowing and grants. They would need continuous, scaled-up international support to be able to meet the minimum needs in terms of human capital spending as well as other budgetary obligations.

BOX 4.5: SPENDING PER CAPITA VS SPENDING AS PERCENTAGE OF GDP: THE STRUCTURAL GAP OF LICs

In 2018, the average GDP per capita among the LICs (which together account for 651 million people) was US$796. If these countries were to finance their average per capita spending on health—US$40—from their domestic budgets, this alone would correspond to 5 percent of GDP for a mere minimum of health spending. For many of these countries, this amounts to more than half their domestic revenue collection; only a few of them could mobilize 15 percent of GDP in revenues.

The situation among the poorest countries is even more acute. Take the example of the Central African Republic (CAR), a fragile and conflict-affected country with 4.7 million people in 2018, a GDP of US$2.2 billion (that is, GDP per capita of US$476) and a DRM of 8.8 percent of GDP, or US$196 million. If CAR were to finance the US$40 from its domestic budget, this would amount to US$187 million, equivalent to almost its entire DRM. Even if the country’s DRM reached the threshold of 15 percent of GDP, it would mobilize US$300–350 million, and the US$40 per capita would still absorb over 55 percent of the resources available through DRM, just for a minimum of health spending.

Another example is the Democratic Republic of Congo (DRC). In 2018, the DRC had a population of 84 million, a GDP of US$47 billion (GDP per capita of US$561), and a DRM of 10 percent of GDP or US$4.7 billion. This is half the revenue of Washington, DC, with a population of 0.6 million. Financed through the budget of DRC, US$40 per capita amounts to US$3.4 billion and absorbs 72 percent of domestic resources. If DRM were at 15 percent of GDP, the US$40 per capita would still absorb around 50 percent of domestic resources.

The COVID-19 crisis is likely to have worsened the already low, effective capacity of poor economies to mobilize resources, and the extent of minimum needs to which they must respond.

Source: World Bank Staff, based on WDI database, IMF Article IV for relevant countries
Where possible, streamlining human capital spending within the rules of sovereign wealth funds (SWFs) can help with both sheltering this spending from downturns and planning over the medium term. SWFs take various forms. Their main purpose is smoothing public spending by saving revenues during an upward economic cycles and spending during downward cycles. Another purpose of SWFs is saving resources devoted for longer-term investments in growth and development. Resources of SWFs are often related to, but not limited to, natural resources exports. SWFs use either the saved funds, the proceeds from the investment of those saved funds, or a mix of both. The importance of human capital implies that countries with SWFs could include the preservation of critical human capital spending in downturns among their rules and objectives. This requires a pre-identification of the budget lines related to these critical human capital expenditures. Beyond responding to downturns, SWF rules and objectives could also encompass the promotion of human capital spending over the medium/long term.

Aside from SWFs, many countries build up “budget reserves” within their central banks without having any special fund with explicit rules. These reserves can also be used to smooth the impact of a downturn on critical human capital spending.

### 4.5 Reducing the Risk and Impacts of Future Crises

**Strengthening countries’ resilience to future crises will involve investments in risk reduction and mitigation.** Human capital protection and green objectives can be built into recovery packages to reduce risks and increase LICs’ and MICs’ resilience to future shocks. International cooperation will also be needed—from responding to crises, including food crisis and humanitarian emergencies, to investing in crisis prevention through technical and financial support. The IMF has stated that temporary and targeted measures may need to be extended, with contingent spending plans developed for adverse situations. These can provide additional support through supplementary budgets, established COVID-19 funds for contingency...and supportive funding from bilateral and multilateral assistance. (IMF 2021a).

**On the risk-reduction side, reforms can be introduced that will decrease the likelihood and severity of future crises.** This can be part of labor-intensive and productivity-enhancing stimulus packages for economic recovery, including investments in green technologies, environmental stewardship, and improved agricultural techniques. Water, sanitation and hygiene interventions can be strengthened as part of basic public health strategies, including to help prevent infectious disease, and as a focus on urban planning and environmental management. Safety nets and social insurance can be expanded to keep people from falling into poverty, with the attendant damage on human and environmental capital, while also encouraging investments in human capital and risk-reduction measures.

**Preparedness for mitigating future crises will involve investments in response systems for a range of crises, from pandemics to natural disasters and economic shocks.** Safety nets need to have greater coverage and flexibility if they are to help people respond to individual shocks as well as large covariate crises. Currently, less than half of the world’s population has access to any kind of formal social protection. In looking toward building a more robust and resilient future, social protection systems need to be expanded, and social insurance coverage decoupled from formal-sector employment to provide a stronger basis for managing a range of risks. Some countries seized the opportunity of the crisis to accelerate social protection reform while leveraging digital tools, such as Saudi Arabia, which prior to the crisis had already started reframing its social protection strategy to build an integrated social protection delivery system. Other forms of insurance, for example, against the impacts of natural disasters, can also be expanded, including through risk pooling across countries. On the health front, ongoing action is needed to address zoonotic transmission from animals to humans, to upgrade disaster risk-management systems, and to adapt urban planning to facilitate disease control. Strengthening health systems also implies using reliable data to target action and to provide concrete, science-based communication to the public.

**Strengthened service-delivery systems can help to prevent the worst impacts of crises, and to formulate agile responses when crises do occur.** Foundational systems that support the delivery of multiple services, and appropriate integration of the
private sector into service delivery systems, can help ensure that the right public investments reach the intended beneficiaries and translate into improved human capital outcomes. This includes energy, water and sanitation, and digital technology investments. Broadband access is increasingly needed not only to deliver core services such as education, as starkly revealed by the COVID-19 crisis, but to provide a platform for responding to crises.

Access to many services also depends on people possessing a valid form of identification, which puts a premium on civil registration, beginning at birth, and foundational identification systems. In the Philippines, for example, longstanding identification problems hampered the implementation of response and relief because of difficulty in identifying the beneficiaries of social programs and the lack of bank accounts for the efficient distribution of transfers. The country therefore decided to accelerate its national ID implementation using online registration and managed to get 27 million individuals registered so far between the start of the pandemic and April 2021, with plans to achieve a total of 50 to 70 million by end-2021. The objectives of accelerated identification are threefold: strengthening financial inclusion with the target of having a bank account for each household by the end of 2021; assisting in vaccine distribution; and improving the distribution of cash transfers.

As countries look to build resilience in the face of future shocks, financial instruments need to be prepared so that they can be deployed rapidly with the onset of future crises. These instruments include contingency borrowing, sovereign wealth funds, and other crisis-response vehicles. There is also a need for close coordination with the IMF on fiscal management, including expenditure frameworks for medium-term planning and debt sustainability analysis to manage debt vulnerabilities. Fiscal planning, including within UN agencies and major international NGOs, is needed to ensure adequate humanitarian responses when a life-threatening crisis occurs. Multilateral financial institutions can be better prepared to provide fast-disbursing budget support and investment projects, while the central banks of some HICs can be prepared to make foreign exchange available through swap lines with their counterparts elsewhere. Beyond direct financial planning, adequate preparation could also involve regulatory adjustments, political support, and national and international cooperation to engage in forward-looking strategic planning.

---

1 World Bank teams, with their detailed knowledge of relevant sectors in client countries, can help foster home-grown adjustment policies and dialogue with the IMF to design consolidation programs in collaboration with countries. The IMF’s strategy for engagement on social spending shows an openness toward designing “socially sensible” fiscal targets and rules that protect social and economic development.

2 The substantial investment made over the past two years to standardize the Bank’s country-based BOOST platforms into sets of annual statistics that are comparable down to the granular level might come in handy. World Bank teams have now examined the entire portfolio of about 80 BOOST countries by tagging line-item expenditures to compile a vast amount of comparative fiscal statistics encompassing granular dimensions such as subsidies, maintenance, capital and current transfers, goods and services (G&S), and so on across all subsectors. This work is at an advanced enough stage that it can now permit a refined analysis of countries’ human capital budgets.
Chapter 4: SECURING RESOURCES FOR HUMAN CAPITAL PRIORITIES

3 This section of chapter 4 draws on World Bank 2018a, an unpublished note.

4 In Fiscal Monitor Update January 2021, the IMF states:

   Addressing weaknesses in tax systems—including domestic measures and reforming international taxation—would support inclusive growth, through broader bases, more progressive personal income taxation, more neutral capital taxation, improved VAT design, greater use of carbon, property, and inheritance taxes, and digital enhancements in revenue administration. Public debt jumped up as a result of the crisis and will keep vulnerabilities elevated. Balancing short-term demand support for the recovery with medium-term sustainability is critical. Credible medium-term fiscal frameworks and calibrated consolidation strategies need to be developed, especially in high-debt countries, supported by pro-growth and inclusive measures. Early announcement of such packages could create near-term space for maneuver. A key element of such strategies will be tax reforms to promote inclusive growth (IMF 2021a, 6).

5 Using historical data from 139 countries, Gaspar, Jaramillo, and Wingender (2016) find that the GDP per capita of a country that is just above the 15 percent of GDP threshold will have grown by 7.5 percent after 10 years.

6 The World Bank recommends that governments control tobacco consumption through a seven-pronged strategy: (1) Go big, go fast: focus first on health gains by starting early in the process with a large increase in excise taxes on tobacco; (2) Attack affordability: follow up on the initial rate increase by recurrent hikes over time to outpace the GDP per capita growth; (3) Change expectations: let consumers know that a tax-rate increase is not just a one-off intervention but that prices will keep going up; (4) Tax based on quantity purchased rather than price paid: this will discourage smokers from switching to cheaper brands in an attempt to pay less tax because the cheaper brands would be taxed at the same rate; (5) Use soft earmarks to win support: earmarking taxes to increased health spending has helped generate grassroots support in several countries; (6) Engage in regional collaboration to boost results: this includes joint operations to fight cross-border threats like cigarette smuggling and seeking regional commitment to tobacco control; and (7) Build broad alliances: steps include mobilizing civil society, opinion leaders, and international partners as well as limiting lobby activities by the tobacco industry. (See Marquez and Moreno-Dodson 2017.)

7 By comparison, in high-income countries, only 25 percent of deaths occur from noncommunicable diseases before age 70. (See Task Force on Fiscal Policy for Health 2019.)

8 World Bank (2019) staff estimate that, in low- and middle-income countries, an excise tax increase that raises the prices of tobacco, alcohol and sugar-sweetened beverages by 50 percent would on average raise additional tax revenue equivalent to 0.7 percent of GDP. Similarly, the Task Force on Fiscal Policy for Health report (2019) estimates that raising the prices of these consumables by 50 percent could avert an estimated 50 million premature deaths worldwide over the next 50 years and raise US$20 trillion in new revenues.

9 ESMAP (Energy Sector Management Assistance Program), World Bank.

10 Social enterprises (SEs) are private organizations that use business methods to advance their social mission in a financially sustainable way. They focus on maximizing the long-term public good as opposed to maximizing short-term profits for their shareholders and private owners. Because of their strong presence and understanding of local communities, SEs are often able to reach the underserved through innovative solutions.


13 The World Bank already considers, as part of a country’s contribution to increasing its productive investment, a reduction of that country’s debt service if it is used to increase spending on human capital. In the area of development policy financing, the World Bank (2017) states:

   In order to provide a Bank Loan to the Member Country or a Bank Guarantee of the Member Country’s debt, for debt restructuring, the Bank needs to show that: (i) the reduction in debt service permitted by the operation is expected to be translated into increased productive domestic investment and thus enhance economic growth and development...

   The policy defines “investment” broadly “to include spending not only for enlarging the productive basis of a country, but also for making it more productive” and includes “both physical and human capital, as well as spending which directly substitutes for future investment requirements, such as spending on improved operations and maintenance.” (See World Bank 2017)


15 “The channels through which social spending may be macro-critical can be grouped into three, often interrelated, channels: Is social spending sustainably financed? Is it adequate? Is it efficient? A particular social spending issue is considered macro-critical if one, or any combination, of these channels is a policy concern” (IMF 2019).
REFERENCES


INVESTING IN HUMAN CAPITAL FOR A RESILIENT RECOVERY: The Role of Public Finance


REFERENCES


INVESTING IN HUMAN CAPITAL FOR A RESILIENT RECOVERY: The Role of Public Finance


PROTECT AND INVEST in people

INVESTING IN HUMAN CAPITAL FOR A RESILIENT RECOVERY: The Role of Public Finance


http://worldbank.org/humancapital