



# Financing for Sustainable Development Report 2021

Inter-agency Task Force on Financing for Development



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# Risk-informed sustainable finance and development



## Chapter II



# Risk-informed sustainable finance and development

## 1. Introduction and key messages

**With more than 2 million lives lost at the time of writing, the spread of COVID-19 and its economic fallout are an urgent call for the global community to better prepare for and reduce the risk of catastrophic events.**

COVID-19 is the latest example of the dramatic financial and sustainable development impacts of risks that materialize in an increasingly complex and interrelated risk landscape. It has shown how the effects of shocks in one area can be transmitted throughout value chains, across geographies and communities, and throughout the wider macroeconomy.

**A key lesson from the current crisis is that development that is not risk-informed is neither inclusive nor sustainable.** Disasters are often the result of decades of accumulation of risk within social, economic, financial, environmental and political systems. Risk drivers that have not been sufficiently addressed, such as high debt and excess leverage, poverty and inequality, infrastructure that is not resilient, and climate change, will continue to derail the financing and progress of sustainable development goals (SDGs). Reducing and better managing these risks is indispensable to achieving the SDGs.

**At the same time, investment in the SDGs reduces exposure and vulnerability and is a major driver of resilience.** Complex, systemic and interrelated risks can be difficult to manage directly, leaving the world ill prepared for crises like the one it is experiencing right now. Traditional risk management tools need to be complemented by investment in prevention, risk reduction and resilience. The 2030 Agenda for Sustainable Development, the Addis Agenda and the Sendai Framework for Disaster Risk Reduction provide a risk reduction strategy and road map to building resilience. For example, investments in social protection systems, which can be ramped up in time of need, can help vulnerable groups, households and societies manage risk and volatility, and protect them from poverty in the event of a crisis.

**The case for investing in prevention, risk reduction and resilience is clear, but significant barriers, such as short-termism, inequities, and lack of inclusion in policy making stand in the way.** Short-term costs of investments may loom larger than uncertain long-term benefits, for both public and private sectors. Investments in prevention and resilience have a public good character, and like many public goods, they are underfunded. While private investors evaluate risks as a routine part of investment decision-making, they are often not sufficiently long-term oriented to internalize significant SDG-relevant risks. This leads to inefficient asset allocations that overlook SDG-related investment opportunities and, at worst, create new risks. Moreover, those most exposed and vulnerable to shocks and disasters often lack the capacity and resources to invest in risk reduction, and voice in relevant policy decisions.

**While all actors must understand, manage and ultimately reduce risks, Governments must lead in taking a risk-informed perspective.** First, Governments are the “risk-bearer of last resort”. When a crisis occurs, private risks often become public liabilities—such as during a financial crisis, when the public sector bails out the banking sector to limit contagion to the broader economy, or covering the cost of reconstruction following a natural hazard. Second, public policy also shapes the risk landscape for investors and other stakeholders, and it is up to policymakers to ensure that incentives are well aligned with SDG-relevant risks (e.g., through carbon pricing and disaster risk disclosure). Third, in some cases it can be advantageous for the public sector to actively seek risks associated with transformative investments, precisely because these investments may lower risks in the future. For example, investments in innovation are associated with high levels of uncertainty and risk—sometimes too large for private investors to take on—but can have extremely high social returns. Governments can also share investment risks with private investors.

**Policymakers need to mainstream risk considerations in all policies, processes and decisions.** This chapter develops a risk framework to help Governments navigate the wide landscape of risk management issues and identify policies best suited to respond to different risk challenges. Such a framework consists of (i) understanding the systemic nature of risk and its implications for the SDGs, including through income, sex, age and disability disaggregated analysis; (ii) reducing the likelihood of shocks when possible (e.g., strengthening the enabling environment for investment, or climate mitigation); (iii) reducing the impact or cost of shocks and hazards and building resilience; (iv) sharing or transferring residual risks (e.g., through insurance or blended finance); and (v) continuous adaptation to and learning from shocks and risks to be prepared to “rebuild better”. This framework must be underpinned by inclusive governance mechanisms at all levels that elicit and address the concerns and interests of all stakeholders, particularly the most vulnerable that often have the least voice and agency.

**Managing risk requires not only that financing is sustainable, risk-informed and resilient, but also that sustainability, risk reduction and resilience are financed. To this end, both national and global action is needed.** To enhance sustainability and resilience of finance:

- Governments need to mainstream risk analysis in public planning processes, for example in the context of an integrated financing framework; overcome short-term and ex post biases in budgeting processes, e.g., by earmarking resources for risk reduction; and adopt a multi-instrument approach to manage multiple risks to public balance sheets;
- The private sector needs to overcome short-termism in investment decision-making and incorporate all material SDG risks in investment decisions.

Financing for sustainability and risk reduction additionally requires:

- Greater public investment in prevention and risk reduction (e.g., in climate mitigation and risk-informed and resilient infrastructure, and economic diversification);
- Strengthening social protection systems;
- Policies and regulations that incentivize investors to internalize those SDG risks that do not materially impact their financial returns.

International cooperation must also be strengthened, in order to:

- Tackle global systemic risks that cannot be addressed by any one country—such as risks arising from the international financial system, climate change and pandemics—which includes strengthening the voice and participation of the most vulnerable countries in relevant decision-making;
- Enhance support to vulnerable and exposed countries, by strengthening their national capacities and systems for understanding and reducing risk, and by putting in place effective ex ante financing mechanisms for risk reduction and prevention, effective disbursement mechanisms, and clear and objective decision-making systems to reduce the need for ex post support in times of crises.

## 2. The cost of doing nothing

**The COVID-19 pandemic and climate change are both manifestations of growing systemic risks—risks that have widespread, cascading effects across geographies and economies.** Technological change, urbanization and globalization have been drivers of economic development across the globe. They have created a world in which economic, technological, political and societal and environmental systems are more connected than ever before. This has led to tremendous opportunity, but has also increased the risk of contagion, including of financial crises, infectious diseases and pandemics, and the economic impacts of disasters. Formerly isolated events can develop into large-scale, far-reaching catastrophes that are hard to anticipate and manage; they can become systemic risks.<sup>1</sup> Impacts of such systemic risks straddle policy domains and can persist over time, as was the case in the global and long-lasting fallout from the crisis in the US sub-prime mortgage market in 2007 and 2008.

### 2.1 The COVID-19 shock

**The spread of the coronavirus has led to a historic decline in economic activity and living standards across the globe, further exacerbating inequalities and disproportionately affecting the most vulnerable.** The pandemic and the ensuing economic crisis have significantly set back implementation of the 2030 Agenda and have reversed progress made in reducing global poverty since 1990.<sup>2</sup> The related economic losses are dramatic, with the global economy contracting by 4.3 per cent in 2020, a decline of global labour income of about \$3.7 trillion, and prospects for recovery uncertain and uneven (see chapter I). The crisis disproportionately affected the most vulnerable people and countries, with socioeconomic conditions, ethnicity, gender and geography shaping its impact. Women have been disproportionately impacted by the COVID-19 crisis, are more likely to lose their source of income, and are less likely to be covered by social protection measures,<sup>3</sup> and women-led firms are disproportionately affected by the pandemic.<sup>4</sup> Insufficient progress on the SDGs was thus a driver of further vulnerability.

**The economic and social costs of the pandemic could have been dramatically reduced with comparatively small investment in prevention and preparedness.** A global pandemic was repeatedly forecast, and yet the world was not ready.<sup>5</sup> The lack of preparedness, and insufficient scale and speed of crisis response—“too little, too late”—now threatens to turn temporary setbacks into permanent losses, further increasing both the societal and fiscal costs of the crisis. Costs of such interventions are extremely small in comparison to the pandemic impact: some estimates suggest that spending \$70 billion to \$120 billion over the next two years and \$20 billion to \$40 billion annually thereafter would significantly reduce the likelihood of another pandemic;<sup>6</sup> limiting vaccine distribution to advanced economies could cause output losses in advanced economies of up to \$2 trillion, and have dramatic adverse impacts in developing countries.<sup>7</sup>

### 2.2 Climate change

**Climate costs will increase even under optimistic scenarios, and could reach catastrophic dimensions if greenhouse gas emissions continue to grow at current trajectories.** Despite a brief decline in

carbon dioxide emissions due to the economic slowdown related to the pandemic, 2020 ranks as the hottest year in recorded history as global temperatures continued to rise.<sup>8</sup> Climate change creates economic costs through physical risks, such as climate-related disasters, and transition risks, as low-carbon strategies lead to stranded assets. Such economic damages are already substantial: with the Earth's temperature 1°C hotter than pre-industrial levels, climate-related damages due to disasters and worldwide economic stress were estimated to be \$165 billion in 2018 (a very conservative estimate).<sup>9</sup> Estimates of future damages are subject to high uncertainty, but there is consensus that they will be substantial: unmitigated warming could lead to average global income losses of over 20 per cent of gross domestic product (GDP) by 2100 (see also chapter I).<sup>10</sup> Regions in the southern hemisphere and poorer countries are projected to experience the most significant impacts on economic growth, further increasing inequality between countries.<sup>11</sup>

**In human development terms, the cost of inaction on climate change is prohibitive.** The poorest people are the most exposed to climate impacts and the least prepared to adapt to the challenges they pose. Climate change will likely push more people into poverty.<sup>12</sup> On the current climate trajectory, reductions in global agricultural yields are expected to reach 30 per cent of today's crop by mid-century, increasing food insecurity and hunger risk in many regions of the world,<sup>13</sup> with disproportionate impacts on the most vulnerable groups. Lack of fresh and sufficient water will increase from afflicting 3.6 billion people today to 5.0 billion over the same period. Climate change also poses risks to international peace and security.<sup>14</sup>

**The cost of timely investments in mitigation and adaptation are modest in comparison to the prohibitive human, environmental, and economic costs arising from inaction.** The Intergovernmental Panel on Climate Change estimates that annual average energy-related investments of \$2.4 trillion (or 2.5 per cent of world GDP) would be needed between now and 2035 to limit global warming to 1.5°C<sup>15</sup>—modest in comparison to the prohibitive cost of unmitigated warming.<sup>16</sup> A recent analysis of the European Union's proposed pathways to achieving its objective of net-zero carbon emissions by 2050 found that this can be achieved at net-zero costs, with cost savings balancing out investment requirements.<sup>17</sup> With regard to climate adaptation, returns on investment in adaptation and resilience have estimated benefit-cost ratios ranging from 2:1 to up to 10:1 for investments in early warning systems.<sup>18</sup> Benefits of investing in disaster risk reduction outweigh costs four-fold.<sup>19</sup>

### 2.3 The opportunity: multiple dividends of investing in mitigation, risk reduction and resilience

**Investments in prevention, risk reduction and resilience are an economic imperative and have significant social and environmental co-benefits.** The economic case for investing in risk reduction and resilience is clear. Such investments also have significant co-benefits. By focusing on risk and risk reduction, Governments, businesses and households lengthen their decision and planning horizons, thus helping to address some short-term biases in decision-making. For example, rural households that lack effective risk management tools avoid specializing in a specific occupation and forego necessary investments to reap productivity gains that come with specialization.<sup>20</sup> Without multi-hazard risk assessments, businesses may choose to invest in locations that offer

short-term profit opportunities but expose them to medium- or long-term disaster risks. Investment in resilience often provides basic infrastructure needed for development, while fueling growth and creating jobs. Risk reduction lowers the cost of borrowing (such as the cost of sovereign debt), thus stimulating further investment and creating a virtuous cycle.

**Yet, short-term incentives, knowledge gaps, externalities and significant disparities in power and resources stand in the way of risk-informed policy and investment decision.** Investments in prevention, risk reduction and resilience have a public good character, calling for public action. Like many public goods, however, they are underfunded and undersupplied. With economic, social and environmental benefits clearly exceeding costs, the question remains as to why economies underinvest in this area. Planning horizons play a role; short-term costs may loom larger than uncertain long-term benefits, creating a bias against investing in risk reduction.<sup>21</sup> This "tragedy of the horizon" is exacerbated by knowledge gaps, which are ever more relevant in a complex and interconnected world where risks are not well understood. There are also free-rider problems when risks primarily affect others, including when addressing global risks and risk drivers that cannot be meaningfully tackled by individual countries. In addition, significant imbalances in power and interest complicate policy action: those most affected by shocks and crises tend to have the least influence over public policy, while more affluent and powerful actors are better able to protect themselves.<sup>22</sup>

**Investments in prevention, risk reduction and resilience are a prerequisite for sustainable development. Decision-making at all levels must become risk-informed.** To this end, we must first better understand risk—a prerequisite for developing effective risk strategies. Such strategies should aim to lengthen decision-making and investment time-horizons, break down silos in policymaking, strengthen global cooperation and solidarity to address global risk drivers, and strengthen the voice of the most vulnerable in decision-making processes. The next section lays out a risk and resilience framework geared towards achieving these objectives.

## 3. Towards a risk and resilience framework for sustainable finance for the SDGs

**A global pandemic is among several events that had been identified in global risk assessments as one of the greatest threats to sustainable development progress.** Other major threats identified include global economic and financial instability; organized crime and terrorism; climate and oceanic change and natural hazards; cyber fragility and technological disruption; geopolitical volatility and other threats to peace and stability; and growing antimicrobial resistance.<sup>23</sup> Because of the systemic nature of many risks (see box II.1 for a definition of risk in this context), risk-informed policies will need to take a multi-hazard approach and focus on reducing existing risk, avoiding the creation of new risk and enhancing resilience.

**Because they reduce vulnerabilities, investment in the SDGs themselves will reduce risk and can be a major driver of resilience.** Resilient systems or communities have the ability to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and

restoration of their essential basic structures and functions through risk management.<sup>24</sup> Common characteristics of such resilient systems include high levels of diversity, which decreases vulnerability to extreme events (e.g., more diversified economies that are less dependent on a narrow export base); high degrees of equity (e.g., more equitable distribution of assets); or high levels of community involvement and inclusion.<sup>25</sup> Investments in the SDGs themselves and efforts to leave no one behind are thus a major driver of more resilient economies and societies. This relationship is not automatic; investments in sustainable development can also create new risks. However, if risks and possible trade-offs are better understood and made explicit, then investments can be risk-informed and create opportunities for sustainable development.<sup>26</sup>

**Governments play a unique and important role in managing risks: their policies shape the risk landscapes for other stakeholders, including investors; but Governments are also the ultimate bearer of risk.** This is true on the domestic level, but also applies to global governance of the international system. Governments have three distinct but overlapping roles in terms of risk management:

- (i) **Public policymakers are the ultimate bearer of risk to SDG progress.** Governments and the people they represent, as the custodians of the 2030 Agenda and the SDGs, are directly concerned with, and

ultimately responsible for, risks to their implementation. Governments will by default have to address the fallout from shocks and crises, including tail risks (such as COVID-19), even when the shock is due to poor risk management by private entities, such as during the global financial crisis. There are powerful incentives that underplay such risks, with “wilful blindness” as an excuse for inappropriate risk management, leaving the public sector to address the fallout.<sup>27</sup> While this includes national action, many risks cannot be addressed by a national Government alone; strengthened multilateralism and international cooperation is needed to address global risks that threaten sustainable development. And, in some cases, the international community becomes the ultimate bearer of risk, such as when disasters lead to humanitarian crises, underscoring the importance of risk-informed international cooperation.

- (ii) **As the shapers of the risk landscape, policymakers can reduce risks for individuals, investors, and other stakeholders, and set incentives to better align private risk-taking with the SDGs.** A longstanding objective of public policy, particularly in a development context, is risk reduction to incentivize investments—by improving the economic enabling environment, for example. Public policy can also be used to regulate and incentivize private stakeholders to reduce risk-creating behaviour, such as through carbon taxes to

## Box II.1

### Understanding risk: definitions and delineations Risk in different communities

Risk is defined differently by different communities. The International Risk Governance Council, for example, defines risk as the unexpected, or as uncertainty about and possible severity of the consequences of an activity or event with respect to something that humans value.<sup>a</sup> In the context of disaster risk in particular, this is spelled out as the potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time, determined probabilistically as a function of hazard, exposure, vulnerability and capacity.<sup>b</sup> In an investment and finance context on the other hand, risk is understood as the probability of actual results (or returns) differing from expected results, including positive or negative deviations. Investors will demand higher expected returns for riskier assets in order to be compensated for this volatility.

Most fundamentally, then, risk refers to the unexpected, or the **likelihood of deviations in ultimate outcomes of activities**, investments or events from expected outcomes. For the purposes of the thematic chapter in the *2021 Financing for Sustainable Development Report*, which touches on all of the above dimensions and understandings of risk, it is this broad understanding that is applied.

#### Risk and uncertainty, risk management and resilience

Risks can be quantified. For risks such as financial market and credit risks, most disasters, health risks or traffic accidents, the probability of the event occurring and the severity of loss can be estimated. **Risk management** tries to mitigate (prevent, reduce or transfer) these “knowable” risks.

Only a subset of unexpected events can be assessed quantitatively. Many events and their consequences can be assessed only with qualitative methods, if at all. Such non-quantifiable events are often termed “uncertainty,” following the classic terminology by Knight.<sup>c</sup> This is particularly the case in a complex and interconnected world, where small events can have large knock-on effects—in other words, where risks tend to be systemic. Multi-hazard probabilistic risk assessments can help estimate economic and human impacts of a disaster and invest in risk reduction accordingly in such contexts.

Nonetheless, it is not possible to identify, let alone quantify, all events. Enhancing a system’s ability to maintain capacities for action under stressed circumstances, or increasing **resilience**, is thus an important complement and enhances risk management efforts.

**Source:** UN DESA.

**a** International Risk Governance Council. 2017. *Introduction to the IRGC Risk Governance Framework*, revised version. Lausanne: EPFL International Risk Governance Center.

**b** United Nations. 2016. Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction. Note by the Secretary-General. A/71/644. Available at <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N16/410/23/pdf/N1641023.pdf?OpenElement>. In addition to risk, the working group also defined other relevant terms: **Exposure** is the situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard prone areas. **Vulnerability** refers to the conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of shocks and hazards. **Resilience** is the ability of a system, community or society exposed to shocks and hazards to resist, absorb, accommodate, adapt to, transform and recover from their effects in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management.

**c** Knight, Frank. 1921. *Risk, uncertainty and profit*. Cambridge: Riverside Press.

reduce greenhouse emissions, or standards, effective land use or planning, codes and regulations to ensure resilient infrastructure and buildings (see chapter III.A).

- (iii) **Governments can also take risk directly on their balance sheets and/or share risks with private investors.** While Governments are the risk bearer of last resort, such risks are often hidden and not visible on balance sheets, and hence are often insufficiently understood or managed. At the same time, some investments are associated with levels of uncertainty and risk too large for private investors to take on alone. While not necessarily commercially viable, they are socially desirable as they have the potential to generate high social returns and SDG impact—impact that will also strengthen resilience and reduce broader risks to society. In such cases, it may be advantageous for the Government to actively take on and manage such risks directly on public balance sheets. If well managed, public development banks and development finance institutions, or risk-sharing instruments such as blended finance, can help to close large investment gaps in many SDG-related areas (see chapter III.A).

#### How financing policies best incorporate risk management will depend on the type and nature of risk that is being addressed.

While a full mapping of the SDG risk landscape is beyond the scope of

this report, the identification of origins and impacts of key risks (and opportunities) can help determine appropriate financing policy responses, including who is best placed to take action. Box II.2 lays out such a categorization, focusing on whether risks are (i) exogenous or endogenous, and (ii) systemic or conventional. Box II.3 provides an illustration for the case of infrastructure from the perspective of investors. For example, the first-best policy response to endogenous risks (risks that are created or shaped by actions of stakeholders) is to reduce them whenever possible: Governments can reduce certain investment risks through policies that improve the enabling environment. Conventional risks can also be reduced, and managed through traditional risk sharing techniques, in particular through diversification, including insurance. Systemic risks on the other hand are difficult or impossible to diversify or insure. To prepare for these risks, Governments can invest in resilience, which strengthens the overall ability of the economy and society to withstand shocks and recover.

#### Implications for SDG risk and resilience policies

**A risk and resilience framework for the SDGs needs to account for the increasingly systemic nature of risk; traditional risk management frameworks thus need to be complemented with a risk reduction and resilience focus.** Risk can never be completely eliminated, particularly in a complex and interconnected world. Nor is

### Box II.2 Towards an SDG risk landscape: risk origin and impact

#### Origin of hazards and shocks

Understanding the origin of hazards and shocks can help policymakers identify ways to best manage risk, as well as to identify who is best placed to do so. The STEEP risk classification commonly used by risk managers closely mirrors the SDGs, including **Societal** (e.g., inequality or health risks), **Technological**, **Economic** (e.g., uneven growth or financialization), **Environmental** (e.g., climate change or environmental degradation), and (geo)**Political** (e.g., conflict) risk. “Communities of practice” in each of these domains have expertise in assessing respective risks, and will likely play an important role in addressing them. Within Governments, such communities of practice may be mirrored by different ministries. Coordination efforts, such as those made through an integrated national financing framework, can help policymakers examine linkages across areas, and how systemic risks might spread and be prevented.

Risk management responses will differ depending on whether shocks have external origins (are exogenous), or are driven by behaviour and policies of stakeholders (are endogenous). **Exogenous shocks** originate outside the control of a national Government or entity; it is thus usually not possible to prevent these, or even reduce their likelihood. In contrast, **endogenous shocks** are impacted by behaviour.

Whether risks are exogenous or endogenous depends on perspective: for an investor, project-specific risks will be endogenous, but government policy risk will be exogenous; in contrast, from the Government’s perspective, policy risks are endogenous, as they reflect risks that can be prevented or reduced (i.e., mitigated) through policy reform. On the other hand, no single Government can mitigate climate change on its own, and small island developing States most affected by climate disasters have the

least agency. For them, these risks are exogenous. The **national** policy response to such exogenous shocks will generally focus on reducing the impact of hazards, investing in resilience and insuring against risk. To address the root causes of these shocks—through **global** climate mitigation efforts, for instance—international cooperation is needed.

#### Risk impact

How the impact of risks materializes further determines the range of actions. For risk managers, risks can be categorized as systemic or conventional, each of which entails different responses.

**Systemic risks** are characterized by cross-domain impacts (e.g., a health crisis permeating into an economic and fiscal crisis). They affect whole economies, can cross borders, or at least are correlated across a wide range of projects or investments. Because they cross domain boundaries, they often do not neatly fall within the responsibility of a single organization or Ministry, increasing coordination burdens. Systemic risks often share characteristics of so-called tail risks—low probability events with a very high impact. Such tail risks are often ignored by both investors and policymakers because they are either poorly understood, are considered too unlikely, or because time horizons are too short. Yet the impact can be extremely costly, as evidenced by the COVID-19 pandemic.

**Conventional risks** have a more limited scope of adverse effects, and are better understood than systemic risks. Conventional risk can be **idiosyncratic** or specific to a project or investment, without wider knock-on effects or contagion (e.g., technological or operational risks for an infrastructure investment). Because such risks are not highly correlated with other risk factors, they can be managed as part of a diversified portfolio, or through insurance.

**Source:** UN DESA.

risk elimination desirable in all cases, since risks are often associated with opportunity and innovation, with positive impacts on sustainable development. For investors, risk management is thus about understanding, weighing and managing cost and benefit associated with activities or investments and their related opportunities and risks.

A traditional risk management cycle consists of two phases:

- (i) **Risk assessment**—risk identification/early warning, modelling/evaluation/assessment;
- (ii) **Risk treatment/management**—including reducing the probability of a shock (or avoiding risk-incurring activities altogether when possible); reducing the cost or impact of shocks; and/or sharing or transferring risk.

In a complex risk landscape, risk managers and policymakers have increasingly complemented this approach with a focus on risk reduction and resilience. For example, the Sendai Framework stresses the limitations of a hazard-by-hazard view of risk management, with a view to strengthening our ability to understand and reduce systemic risk.<sup>28</sup> It expands the prevailing focus on natural hazards to include human-made, technological, environmental and biological hazards, and moves the focus from managing disaster events to managing disaster risk systemically by reducing existing risk, preventing the creation of new risk and managing residual risk.<sup>29</sup> Resilience strategies, which complement traditional risk management practices, consider how to

- Strengthen systems ability to **maintain basic functionality** through crises and **to recover** quickly from shocks; and
- **Learn from crises and shocks, adapt to new conditions and rebuild better.**

A risk/resilience framework would thus include efforts to both reduce and manage risks, including to (i) better understand risks; (ii) prevent or reduce the likelihood of risks materializing; (iii) reduce the impact of hazards, decrease vulnerability and exposure and enhance resilience capacities; (iv) share and/or transfer risk, and (v); rebuild better in recovery (see also figure II.3). These efforts must be underpinned by inclusive risk governance that engages a diverse set of stakeholders in the process.

### Inclusive risk governance

**Efforts to understand and manage risks must be informed by the concerns, interests and perceptions of all stakeholders.** Stakeholder involvement improves both the quality and the legitimacy of policy action: it helps to enhance risk awareness; elicit stakeholder risk perceptions, know-how and preferences that can all inform policy action; and creates confidence in such policy action.<sup>30</sup> Inclusive approaches are particularly important for complex risks, where expertise of multiple communities is required.

**There are significant governance gaps at global, regional, and country levels that act as a barrier to inclusive risk governance.**

Women and other marginalized groups (e.g., people living with disabilities) are underrepresented in decision-making processes at all levels. Yet, accommodating their specific needs and capacities is critical to reducing vulnerabilities and building resilience. These groups also have unique knowledge on the specific needs and risks faced by their communities, and communities in general. Addressing these governance gaps and building

the enabling environment for women's leadership and capacities across the SDG risk landscape will ensure the effectiveness and sustainability of disaster risk reduction and resilience action. Establishing or strengthening multi-stakeholder national disaster risk reduction platforms can significantly strengthen participatory and inclusive risk governance. At the global level, countries most vulnerable to disasters have the least agency to address risk drivers, calling for more inclusive global governance mechanisms that enhance their voice and representation.

### Understanding risk

**Understanding risk is the basis for risk-informed decision-making.**

Understanding risk includes assessing the sources of risk (e.g., hazard identification across the STEEP (societal, technological, economic, environmental, (geo)political), exposure and vulnerability and capacity assessments), and their potential impacts or costs. Assessments should also consider the state

#### Box II.3

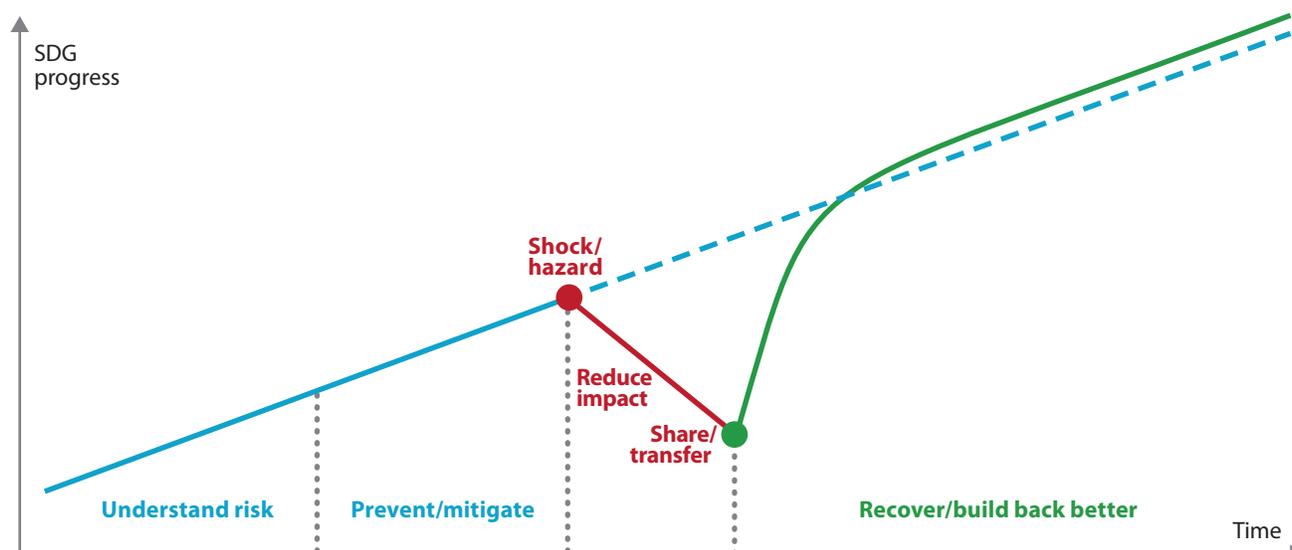
#### Types of risk and infrastructure finance

By understanding the risks investors face in an infrastructure project, policymakers can help improve risk-return profiles of investments, and thus help close infrastructure financing gaps:

- Infrastructure project selection, development and construction phases entail many endogenous risks that are directly impacted by the developer's behaviour, such as quality of construction or cost overruns. They are difficult to monitor and control by outsiders (be they financial investors or policymakers), and should thus be borne by the operating firms directly involved (e.g., by including penalty clauses in contracts, or other governance arrangements);
- Risks that are exogenous to the project but idiosyncratic (such as demand risks) can be diversified in a portfolio of investments, and could thus be borne by an investor. In a global portfolio, even nationally systemic risks (such as currency risks) may be diversifiable, meaning that international investors or regional and multilateral development banks (MDBs) that have exposure across countries should be in a position to help hedge these risks;
- The most challenging category for the infrastructure investor is one with endogenous risks that are also systemic—for example, government counterparty risks, where a Government reneges on contractual obligations. From an investor's perspective, such risks cannot be diversified, at least not at the national level. MDBs may be able to take on such risks, as they also have some leverage over the Government in question, and can support efforts to reduce risks. In addition, as MDBs have exposure across countries, they may be able to manage this risk within a diversified portfolio—across several countries or currencies, for example—as any one loss would be compensated by returns on other investments (see also *Financing for Sustainable Development Report 2020*). At the same time, Governments can take actions to reduce policy risks, thus lowering the cost of capital, and encouraging greater investment.

**Source:** UN DESA, based on Juan Ketterer and Andrew Powell. (2018). *Financing Infrastructure: On the Quest for an Asset Class*. IADB Discussion Paper 622.

Figure II.1  
**A risk and resilience framework**  
 (SDG progress over time)



Source: UN DESA

of knowledge about risks—that is, whether risks are well understood or complex, with difficult-to-identify causes and consequences such as systemic risks. All these elements inform risk evaluation.<sup>31</sup>

**Complex and systemic risks require new conceptual and analytical approaches.** Technical communities in the areas of disaster risk and finance, among others, use models to better “see” risk in the present or near future. Most of these models are based on historical data and observations, assuming that the past is a reasonable guide to the present and the future. In a complex world, where small changes can have large and unanticipated effects, this critical assumption no longer holds. In addition, different communities’ risk assessment methodologies and tools vary and are not easily integrated, leading to mispricing of risks, hidden risks, and risk creation. For example, many investment models do not fully integrate disaster and social risks into economic and financial risk assessment tools, while disaster risk assessments may not fully articulate the complex economic and financial impacts.

**Critical gaps in the availability, quality, comparability, and dissemination of sex, age and disability disaggregated data also act as a barrier to understanding the differential impacts of hazards.** Most vulnerable and marginalized groups are not visible in mainstream data; limiting gender- and age-responsive analysis of risks, decision-making, policy formulation and practice.<sup>32</sup>

**Few countries identify and assess risks in a systematic fashion and, similarly, investors often ignore sustainability risks. But tools and approaches are available to strengthen SDG risk assessments.** Risk knowledge and processes are surprisingly scarce in Governments. With some exceptions, most Governments do not have formal risk management functions responsible for understanding, modelling, mitigating and reporting on risks in a comprehensive way. When they are in place, they

are usually confined to specific threats, such as climate risks or disasters. At the same time, there is a wide range of frameworks and risk assessment tools from different communities that decision makers can use.<sup>33</sup> The Inter-agency Task Force on Financing for Development put together a selection of such tools in its guidance material on the implementation of integrated national financing frameworks (INFFs), focusing on risks relevant to sustainable financing.<sup>34</sup> Public policy can also play a role in enhancing sustainability risk assessments by the private sector. For example, metrics for sustainability risk reporting and disclosure by companies, which increase transparency and better align risk perceptions with sustainable development risks, are currently incoherent and contradictory (see chapter III.B).

### Prevention and reduction

**Investments in prevention aim to address the underlying drivers of risk, reduce the probability of shocks from occurring in the first place (when that is a possibility), reduce existing risk, and avoid the creation of new risk.** Such preventative measures can be applied across economic, social and environmental domains. Prevention is most relevant to risks over which agents have some influence (e.g., endogenous risks, as described in box II.2). Prevention is the first-best policy intervention, and highly cost effective. But it is not always possible. In the context of investment decisions, because of the dual nature of risk and opportunity, risk taking can be a driver of innovation. Weighing risks and opportunities is also at the heart of investment decisions (see box II.4).

**Good governance and creation of enabling environments for sustainable development is an important aspect of prevention and risk reduction.** Some shocks and hazards are endogenous to a country or organization—that is, they arise from its own actions and can thus be prevented. Poor governance, policy uncertainty or political instability are such

endogenous risk factors that policymakers can aim to reduce or prevent.

**Because of the prominent role of global systemic risks in the SDG risk landscape, many such preventative actions require global cooperation.** For example, investments in climate change mitigation (renewable energy investments and investments in energy efficiency, removal of fossil fuel subsidies, adequate pricing of carbon emissions) will reduce greenhouse gas emissions and the frequency and intensity of extreme weather.<sup>35</sup> As noted above, climate mitigation requires global cooperation, as is the case for many global risk drivers that are largely exogenous at the national level, such as global financial instability, antibiotic resistance, or geopolitical volatility. Poverty and inequality within different dimensions (income, wealth, gender, and access to technology and resources) are other important risk drivers that operate at global, national and subnational scales, and highlight the need for risk-informed development cooperation that tackles underlying risk drivers (see section 4.3).

### Reducing the cost (or impact) of risk

**Investing in the SDGs can enhance resilience.** Vulnerability<sup>36</sup> is closely linked to sustainable development and the SDGs: poverty, inequality, gender, education and health status, disability and environmental concerns are identified as determinants of household vulnerability in assessments of an extremely diverse set of risks.<sup>37</sup> Investments in health systems or strong social protection systems (which can be ramped up in times of crises) can protect households from poverty in the event of materializing risks. Investments in resilient infrastructure (including

#### Box II.4

#### Risk, opportunity and prevention

Investment decisions (public or private) are about whether to take on risk to pursue an opportunity. For private investors that means weighing potential risks versus expected financial rewards, compared to other investment opportunities. For the public sector, the decision is more complicated; it includes weighing financial risks against the public benefit (both positive impacts and unintended negative consequences of the Sustainable Development Goals) and then comparing the risk/reward of acting today against the cost of doing nothing (see section 2 of the *Financing for Sustainable Development Report 2021*) or taking other actions. Either way, the decision to invest and to seek an opportunity implies a degree of risk-taking. The question then is about how risks that cannot be reduced can be managed.

There are in fact suggestions that rather than taking on too much risk, public actors, such as multilateral development banks, do not take enough risk—that there is underinvestment in areas with high risks and high potential social returns.<sup>a</sup> This may reflect risk aversion on the part of these institutions and their shareholders. Yet, the public sector is already implicitly taking significant risks, even when they are not visible on current public balance sheets. The cost of taking explicit risk may be well compensated if those investments reduce risks in the future.

**Source:** UN DESA.

<sup>a</sup> See for example: Lee, Nancy. 2018. *More Mobilizing, Less Lending*. A Pragmatic Proposal for MDBs. CGD Brief, April 2018.

retrofitting) can reduce losses and disruptions from natural hazards.

**Improved macroeconomic management can also reduce vulnerabilities.** Macroeconomic imbalances (such as current account deficits, credit-driven asset bubbles, or rapidly rising credit growth and debt levels) and financial sector fragility expose populations to risk due to external shocks.<sup>38</sup> Increasing trade and financial integration of the global economy has increased contagion of shocks, and increased exposure of the real economy to financial shocks. For example, volatile international capital flows often translate into volatility in the real economy in developing countries. A lack of economic diversification (dependence on commodity exports, for instance) is another source of macroeconomic vulnerability, with resource revenues dependent on volatile global commodity prices.<sup>39</sup>

### Managing residual risk through risk sharing

**Risk that can be neither prevented nor reduced may sometimes be shared or transferred, through insurance and different types of risk-sharing mechanisms.** That includes unemployment insurance, risk-informed social safety nets, and other types of social protection at the national level, which can support anticipatory action as well as quick recoveries from crises, preventing scarring effects and long-term consequences. It also includes private insurance. The insurance industry has always had an important role in the transfer of risk and is a centre of expertise regarding risk management in general. A right degree of insurance coverage can mitigate negative economic impacts of disasters and increase overall resilience.

**However, insurance is not a silver bullet.** Insurance can be a powerful tool for risk management, but it is also an expensive one for Governments that otherwise have access to sufficient sovereign financing. Insurance can also enable public and private actors to engage in risk creating behaviour, including investing in risk-prone areas, without consideration of the human costs and wider socioeconomic impacts should a disaster hit. Depending on the frequency and severity of risks to be managed, Governments can combine (or layer) financing instruments that address different needs and have different cost implications: risk-transfer and insurance-type mechanisms for low frequency but high-severity events; contingent financing for intermediate cases; and budgetary instruments (such as reserve funds, or general contingency budgets) for high-frequency but low-severity events.<sup>40</sup> Such an approach prioritizes cheaper sources of funding, ensuring that the most expensive instruments like insurance are used only in exceptional circumstances. Insurance-type instruments have been used to provide rapid and predictable funding to countries in the event of disasters, with mixed experiences: in the case of the response to COVID-19, pandemic bonds did not succeed in releasing sufficient funding in a speedy manner. To be effective, disaster risk insurance must incentivize disaster-risk-reducing behaviour and include provisions to ensure companies build better from the start and rebuild better after a disaster. Moreover, disaster risk insurance must be part of a larger disaster risk reduction financing strategy focused on prevention.

**Risk sharing is also used to stimulate investment and share macroeconomic risks.** Risk-sharing instruments (e.g., guarantees, political risk insurance, and other forms of blended finance) can improve the risk/reward equation in investment decision-making (see chapter III.C). Risks can also be shared or transferred at the international level through arrangements, such as the international financial safety net anchored by the International Monetary Fund (IMF), quick-disbursing financial mechanisms in response to disasters, or financial instruments such as state-contingent debt (see chapters III.E and III.F).

## Recovery and rebuilding better

**Resilient systems are able to recover more quickly from crises, and rebuild better by adapting to new realities.** Highly effective systems are characterized by a process of continuous learning: losses incurred during a crisis are evaluated, and lessons are considered in recovery and rebuilding efforts to improve future capabilities. For example, strengthening social protection systems or using stimulus packages to rebuild resilient infrastructure can help address the immediate crisis while building resilience to future shocks. Learning processes must be inclusive, to ensure that recovery interventions overcome rather than reinforce existing inequalities, including gender inequality.

**Large economic stimulus packages during the COVID-19 crisis and investments in recovery provide an unprecedented opportunity to transition towards risk-informed and sustainable growth and development paths.** The immediate crisis response has understandably focused on providing relief to those most affected. Stimulus spending to date has had a limited share of “green” investments, focusing instead on income support. Yet some measures to stimulate the economy (e.g., relaxing environmental regulations) may raise the risks of future disasters. A subsequent phase of recovery investments provides an unprecedented opportunity, with vast stimulus of about \$12 trillion, or 15 per cent of global GDP, planned (see chapter I). A recent study suggests that investing only a tenth of this recovery investment into climate mitigation and low-carbon investments would suffice to meet carbon energy investment needs compatible with the Paris Agreement.<sup>41</sup>

## 4. Risk-informed financing for sustainable development

**The goal of risk-informed financing policies is to ensure not only that financing is sustainable, risk-informed and resilient, but also that sustainability, risk reduction and resilience is financed.** Based on the framework laid out above, this final section discusses risk-informed financing policies across the action areas of the Addis Ababa Action Agenda, with more detailed discussions in the respective chapters of the report. It addresses the following:

- **Sustainable, risk-informed and resilient finance**—ensuring that public budgets and (public and private) investments are *financially* sustainable and able to withstand shocks and do not create new risks;
- **Financing for sustainability, risk reduction and resilience**—*mobilizing* financing and investment for risk reduction and resilience;
- **International cooperation**—enhancing *international support* in meeting these objectives; and
- **Development-specific financing instruments**—determining their most *appropriate use to support risk reduction and resilience building*.

### 4.1 Sustainable and resilient finance

**Public and private actors must manage risks to their balance sheets, a task that is becoming more difficult in an increasingly complex risk landscape.** The COVID-19 pandemic has revealed and highlighted weaknesses

and blind spots in both public and private investment and financial management. They relate to growing systemic risks, including environmental, social and other SDG-related risks that are increasingly impacting financial outcomes, but remain underappreciated, in part due to short time horizons.

### Managing shocks to public balance sheets

**Risk management is a central aspect of traditional public financial management.** It aims to ensure the sustainability of public balance sheets and macrofiscal frameworks in light of multiple fiscal risks.<sup>42</sup> The primary objective is to stabilize economic activity and public service delivery in the short run, and to promote economic growth and sustainable development over the longer term. Nonetheless, the capacity to manage fiscal risks is limited in many countries.

**COVID-19 has exposed vulnerabilities of fiscal accounts and public financial management systems the world over, which has been especially challenging for developing countries.** COVID-19 has starkly illustrated the vulnerability of public finances and debt sustainability in many countries (see chapter III.E). Developing countries in particular are exposed to a range of risks that can have significant macroeconomic and fiscal impacts, including disaster risks, commodity price volatility, and other external economic shocks. Addressing these risks more thoroughly and effectively requires (i) better understanding and planning for such risks, including through medium-term revenue strategies; (ii) adoption of a multi-instrument approach for fiscal risk management; and (iii) risk-informed debt management, at both the national and international levels.

**To build resilience into public budgets, Governments should incorporate risk analysis into planning processes and overcome ex post biases.** Countries tend to allocate significantly more funding for crisis response than to ex ante risk reduction. This is mainly due to limited understanding of risks and options for risk reduction measures, as well as high political visibility for ex post, i.e. assistance. A risk-oriented public finance system needs to overcome this ex post bias in policy. This first requires having a good understanding of the risk landscape and its potential impacts on public finances by, for example, conducting multi-hazard risk assessments in the context of an INFF, thus providing the basis for a realistic assessment of costs and benefits of different financing and policy options. Many developing countries that are faced with multiple unfunded or underfunded urgent sustainable development needs will require additional international support. To overcome poor incentive structures, some countries provide targeted grants to agencies and line ministries or build in relevant budget lines in all agency budgets. Both national finance ministries and donors can use these tools or identify alternative ways to reserve resources for investment in risk reduction.<sup>43</sup>

**A wide range of risks to fiscal sustainability calls for a multi-instrument approach.** Risks range from disasters, financial crises and other macroeconomic shocks to contingent liabilities associated with guarantees, public-private partnerships and state-owned enterprises. A range of instruments and approaches is therefore necessary to respond to the various characteristics of these risks:

- **Prevention:** a “balance sheet approach” to fiscal policy can help policymakers limit endogenous risks on fiscal accounts (e.g., contingent liabilities) and thus reduce the probability of fiscal shocks from materializing (see chapter III.A). State-owned enterprises and development banks

need to be transparent, with assets and liabilities that are accounted for, and to adopt effective risk management. Controls or ceilings on exposures (e.g., through limits on issuances of guarantees or liabilities, or fiscal rules for subnational governments) can also help reduce fiscal risks;

- **Reducing risk impact:** fiscal policy can also be a tool to reduce the impact of exogenous risks outside the direct control of Governments on public balance sheets; for example, by diversifying the tax base and reducing dependence on taxing commodities, Governments can reduce the cost of commodity price volatility.
- **Risk transfer and risk-sharing mechanisms:** they include insurance (e.g., sovereign parametric disaster risk insurance, insuring public assets against disasters, reinsuring guarantees), hedging (e.g., of commodity price risk), pre-arranged credit lines with international institutions (such as the World Bank's Catastrophe Deferred Drawdown Option), or issuance of state-contingent debt instruments (see below). The international community provides support for many of these mechanisms (see below).
- **Provisions for risks** that cannot be reduced or transferred allow policy-makers to manage these risks without threatening stability. For example, countries can provision for disaster risk by setting aside funds (e.g., disaster funds or budget lines) and establishing budget contingencies—a form of self-insurance. Automatic stabilizers (spending increases or tax decreases in recessions that occur without discrete policy interventions) not only smoothen the business cycle, but can also support fiscal sustainability. Such measures are most appropriate for moderate but frequent shocks. For large-scale shocks, dedicated financial assets (e.g., a stabilization fund) are more appropriate,<sup>44</sup> but in exceptional circumstances, such as major disasters, international support will often be indispensable.

**Fiscal risk is intrinsically linked to sovereign debt management and debt sustainability.** Countries borrow to mobilize resources for public spending. When borrowing is well managed, they do so at the lowest possible cost and with prudent levels of risk. There is a cost-risk trade-off: short-term debt and floating-rate debt is cheaper, but usually more risky than longer-term and fixed-interest debt, due to higher refinancing and interest risk. Similarly, debt issued in foreign currency may have a lower coupon or interest cost, but adds volatility to debt-servicing costs due to exchange rate movements. Short-term incentives may contribute to countries issuing floating-rate and/or foreign debt, which may be cheaper within the time frame most relevant for decision makers, but which creates longer-term debt sustainability challenges. In addition, many developing countries are unable to issue long-term local currency debt at reasonable cost because domestic financial markets are insufficiently deep, setting up challenging trade-offs, particularly in light of large unmet financing needs. Such trade-offs should be explicitly considered in a country's debt management strategy.

**State-contingent debt instruments could increase the resilience of sovereign balance sheets.** Such instruments are structured to link a country's debt obligation to its ability to pay. They can provide insurance against risks such as commodity shocks, disasters or deep recessions by building standstills into debt contracts. As such, they also reduce the need for complicated negotiations on debt standstills, as was the case for the Debt Service Suspension Initiative in response to COVID-19. While not widely used, state-contingent clauses have been introduced in debt contracts of some countries vulnerable to disasters (e.g., hurricane clauses), where occurrence of a disaster automatically triggers a moratorium on debt repayments. There

is a strong case for more widespread use of this mechanism. While markets have been slow to incorporate stage-contingent elements into debt issuance, due in part to high-risk premiums that the market attaches to such events, the public sector could take a lead by including state-contingent elements in public sector lending (see chapter III.E). Insurance-type mechanisms, where countries insure a predetermined amount of debt, and related debt servicing that will be paid by the insurer in case of a disaster, have also been proposed.<sup>45</sup> Relying on clearly specified triggers, contractual approaches do not cover all contingencies, and are thus not a panacea.

## Resilient private business, finance and investment

**Managing risk is at the heart of investment.** Private businesses and investors routinely assess risks relative to financial returns. Because risk is linked intrinsically to opportunity, the objective of their risk management is not to entirely eliminate risk, but rather to incur the "right amount" of well-compensated risk, which maximizes value but remains in line with a company's overall risk appetite. The financial sector and the insurance industry in particular are a center of expertise regarding risk-return management, due to their role in transferring risk.

**The COVID-19 pandemic has revealed underlying corporate vulnerabilities to systemic risks and underlined the importance of considering non-financial risks.** Companies in sectors such as tourism and energy have been hardest hit, but the lack of corporate resilience is more widespread (see chapter I). Major drivers of this vulnerability include high leverage—which amplifies the impact of shocks on corporate balance sheets—and complex, just-in-time supply chains with no redundancies built in to accommodate shocks. In both cases, an excessive focus on short-term results that unduly discounts risks and uncertainties that lie further in the future plays a role. At the same time, investor surveys indicate that COVID-19 has been perceived as a sustainability crisis, with parallels to other global systemic risks such as climate change. It may thus further increase investor focus on the material impact of climate and other environmental, social and governance (ESG) risks on financial returns.<sup>46</sup>

**Financial markets are increasingly recognizing climate-related risk, but continue to underestimate other material SDG risks.** Climate risks affect the vast majority of financial assets—93 per cent of equities by market capitalization in the United States of America alone, according to some estimates.<sup>47</sup> Such risks include physical risks, such as climate-related disasters, and transition risks related to impacts of climate policies, such as carbon pricing, leading to stranded assets. For major institutional investors, such risks are now too large to be diversified. To manage these risks, large institutional investors have started to work with the companies in which they invest (e.g., through active ownership) to reduce carbon intensity, as a way to increase the resilience of their investment portfolios (see chapter III.B). Yet, while climate risks directly impact the risk-return calculus of investors with sufficiently long time horizons, this is not the case for all investors, nor for other SDG-related risks. Full disclosure of material SDG risks is a precondition for risk-informed behaviour. While some progress has been made with regard to the disclosure of material financial risks arising from climate change, such disclosure often remains partial, and SDG risk disclosures overall remain insufficient, as discussed below.

**Policymakers can reduce risks relevant to investors, or share them, to improve risk/return profiles of investments.** Actions to reduce risks include efforts to improve the enabling environment, such as

reducing administrative hurdles and burdens for businesses, and reducing policy uncertainty and other policy risks for investment—for example, by providing a stable macroeconomic environment. Public actors may also decide to share risks for specific investments, through financial instruments usually provided by development and climate finance institutions. They should, however, only take such risks on their balance sheets when investments support public policy objectives (and thus provide *financing for sustainability and resilience*, as discussed in the next section).

## 4.2 Financing for sustainability and resilience

**While management of material risks is a routine, if challenging, part of financing, financing for sustainability and resilience is not.** Most private investors aim to maximize financial returns, and do not consider SDG factors unless the risks directly and materially impact profitability. They thus do not consider many investments in prevention or resilience, which may not be attractive from a financial risk/return perspective, nor do they consider the social and environmental risks created by their investments. Public actors also underfund investments in prevention and resilience—partly due to lack of knowledge, partly due to poor incentives. This leaves economies and societies vulnerable to systemic risk, and opportunities for sustainable investment overlooked.

### Public finance to enhance risk reduction and resilience

**As the risk bearer of last resort, the public sector has to consider and address the whole range of SDG investment opportunities, not only those that directly impact public budgets.** Beyond the basic approach to fiscal risk management, public finance in its entirety—budgeting, tax policy, debt management and other functions—needs to be geared towards achieving the SDGs. This implies investing in risk prevention, risk reduction and resilience for all stakeholders, not only because of the public sector’s duty of care in its role as the custodian of the sustainable development agenda, but also because building resilience can lower a country’s cost of borrowing, which can further stimulate investment, creating a virtuous cycle. For example, higher vulnerability to climate risk already significantly impacts borrowing costs of sovereigns, with recent studies finding premiums of 275 percentage points on sovereign bond yields of countries highly exposed to climate risk.<sup>48</sup>

**Public finance can be used to enhance prevention.** This includes incentivizing climate mitigation, particularly for major emitters—for example, through regulation, carbon taxes or by phasing out fossil fuel subsidies, which, at \$4.7 trillion, or about 6.3 per cent of global GDP,<sup>49</sup> act as negative carbon price signals (see chapter III.A). Other relevant examples include investing in economic diversification, which reduces economic volatility.

**Public finance can be a major driver in increasing economies’ and societies’ resilience through investments in structural resilience, social protection and more equitable societies.** This includes investments in structural resilience such as resilient infrastructure (see box II.5), early warning systems that lead to early action and are locally designed, inclusive, and gender responsive, and other forms of climate adaptation. Allocation of funding for such investments suffers from the above-mentioned short-term and ex post biases in policymaking, which disincentivize such measures, particularly under tight fiscal constraints.

### Box II.5 Investing in sustainable and resilient infrastructure

Infrastructure investment locks in risk and development patterns for decades. To meet climate targets and the SDGs, such investments must be fully aligned with these objectives. Estimates suggest that even if all new infrastructure had zero emissions, emissions from the existing capital stock would need to be cut in half by 2030 to limit global warming to 1.5 °C—a daunting challenge.<sup>a</sup> Climate change is also increasingly affecting the financial and economic performance of infrastructure assets, through direct damage and rising operating and financing costs. Lack of resilience could increasingly threaten infrastructure financing at a systemic level, due to rising borrowing costs linked to country risk premiums, and reduced availability of insurance.<sup>b</sup>

Large-scale stimulus programmes in response to COVID-19 provide an unprecedented opportunity to transform infrastructure planning, design, financing and delivery, and lay the groundwork for a new development trajectory. To take advantage of this opportunity, a comprehensive approach to sustainable and resilient infrastructure is needed, building on a shared understanding of sustainable infrastructure that is economically, socially and environmentally resilient and sustainable. Such an approach would include:

- Supportive upstream policy frameworks (including mainstreaming disaster risk and climate change considerations in all planning processes and frameworks and infrastructure plans, and policy measures such as carbon pricing) and analytical tools (such as valuation methodologies that balance off the higher upfront costs of climate resilient infrastructure and higher perceived technology risks with their lower operating costs and lower climate physical and transition risks);<sup>c</sup>
- Platforms for project preparation, such as SOURCE,<sup>d</sup> to scale up investment-ready sustainable infrastructure projects;
- Enhanced quality control of projects, including standards and regulations for infrastructure resilience, and enhanced asset management to introduce climate adaptation and mitigation strategies for assets;<sup>e</sup>
- Mobilization and alignment of finance, including additional funding from multilateral development banks, use of blended instruments to attract investors when appropriate, and efforts on the supply side, such as enhanced climate risk disclosure and sustainable investing taxonomies, as well as technical support and capacity building to develop risk-informed and resilient infrastructure projects.<sup>f</sup>

**Source:** UN DESA.

<sup>a</sup> Amar Bhattacharya, et al. 2019. Aligning G20 Infrastructure Investment with Climate Goals & the 2030 Agenda. Foundations 20 Platform. A report to the G20.

<sup>b</sup> Global Center on Adaptation and Asian Development Bank. 2021. A system-wide approach for infrastructure resilience. A technical note. January 2021.

<sup>c</sup> Green Climate Fund. 2020. Tipping or turning point: Scaling up climate finance in the era of COVID-19. GCF Working paper No. 3. October 2020.

<sup>d</sup> See <https://public.sif-source.org>.

<sup>e</sup> United Nations. 2021. Managing Infrastructure for Sustainable Development-A Handbook for Local and National Governments, ch.6.

<sup>f</sup> See, for example, the Coalition for Disaster Resilient Infrastructure (CDRI): <https://cdri.world/>.

Progressive tax systems and other measures that enhance equity and support the most vulnerable are further drivers of resilience. Social protection systems in particular have been a critical source of resilience and facilitated rapid and effective responses to the COVID-19 shock in many countries (see box II.6).

**Risk-informed public finance sometimes calls for taking more risk explicitly on public balance sheets, for SDG investments that will enhance resilience and reduce risks in the long run.** As noted above, commercial investors are poorly suited to finance certain investments with high social returns, both because investors may find risks too large, and because they cannot appropriate sufficient returns. Public development banks and other development finance institutions have a long history of taking on such investment projects, as they can manage risks on their balance sheets and can accept lower returns due to their development mandate. As a result, they not only play a countercyclical role, but also invest in areas where private actors remain reluctant because of elevated risk perceptions (see box II.7). However, because these institutions are usually backstopped by the Government, the risks they accept on their balance

sheets ultimately are risks for the public sector at large. They thus need to not only pursue public policy objectives, but also be prudently managed (see *Financing for Sustainable Development Report (FSDR) 2020* for a detailed discussion on development bank governance and risk management).

### Private investment in sustainability and resilience

**The growing recognition of sustainability risks to material outcomes of corporates does not automatically translate into investment and corporate behaviour that is fully aligned with the SDGs.** As discussed in section 4.1, investors increasingly recognize and address SDG risks that materially impact profitability. But many SDG risks do not impact financial returns, either because they are too far off to be considered by investors (who may have short time horizons), or because they do not impact business performance (e.g., externalities, such as the impact of plastic on the environment). Risk-informed financing policies must thus go beyond efforts to evaluate material risks—to also understand, disclose and ultimately price or otherwise account for all other SDG risks. Only then will commercial investments internalize the impact of their activities on

## Box II.6

### Social protection and household resilience

Social protection systems have been the first line of defence against the negative impacts of COVID-19 on people's health, livelihoods and incomes. With nearly 1,600 measures reported in 209 countries between February and November of 2020, social protection was one of the priority responses to cushion the most adverse socioeconomic effects.<sup>a</sup> Investing in social protection infrastructure during good times can support country responses during crisis. Countries that had strong social protection systems in place could more rapidly use and adapt existing schemes and delivery mechanisms to facilitate access to health care, ensure income security and protect jobs.

The crisis has also laid bare major coverage gaps—especially for workers in the informal economy and their families and migrant workers—and in the comprehensiveness of protection, including health protection, unemployment protection or sickness benefits.<sup>b</sup> In contrast to safety nets that often provide only patchy and limited protection, countries with universal social protection systems were able to readily use existing national administrative capacities and delivery mechanisms, and allowed for expediting of emergency cash disbursement while minimizing exclusion risks.<sup>c</sup>

### From emergency response to long-term solutions

Temporary support measures introduced in the context of this crisis can be utilized as building blocks for protecting individuals beyond the current crisis and ensure preparedness for future crises. To this end, relevant national actors should be involved in the design and implementation of emergency responses and longer-term solutions. Where necessary, international financial and technical support can strengthen national capacities to provide social protection. Moving from emergency responses to long-term solutions will also require coherence with social, economic and employment policies. Extending social protection to workers in the informal economy, for example, can reap a triple dividend: it can provide workers with economic security and facilitate transitions to the formal economy, which would contribute to productivity gains and

broaden the tax base. Coordinating employment and social protection policies can support and sustain economic recovery, for instance, by providing workers who are temporarily out of work with not only income security but also training opportunities to enhance existing skills or reskill.<sup>c</sup>

### Financing social protection floors

The latest International Labour Organization (ILO) estimates suggest that additional resources needed to close the global financing gap in achieving social protection floors (SPFs) have increased by approximately 30 per cent since the onset of the COVID-19 crisis. To close coverage gaps, developing countries would need to invest about 3.8 per cent of their GDP on average.<sup>d</sup> Diverse financing mechanisms will be needed, based on the principle of solidarity at both national and international levels. This includes strengthening domestic resource mobilization (see chapter III.A) and also improving efficiencies. Administrative costs are an important consideration in SPF design. For example, one African country shifted social transfer distribution from a cash system to a mobile-money-based system, which resulted in a 20 per cent drop in the variable administrative costs. However, such shifts need to address unequal access to technology and, specifically, the access of key marginalized groups, including women (see chapter III.G). The ILO Social Protection Floors Recommendation, 2012 (No. 202), provides guidance on objectives to which efforts to build social protection should be oriented.<sup>c</sup>

**Source:** ILO.

- a** ILO. 2020a. Social Protection Monitor: Social Protection Responses to the COVID-19 Crisis around the World. Available at <https://www.social-protection.org/gimi/RessourcePDF.action?id=56047>.
- b** ILO. 2020b. Social Protection Spotlight. Various issues. Available from <https://www.ilo.org/secsoc/information-resources/publications-and-tools/Brochures/lang--en/index.htm>.
- c** ILO. 2021. Towards Solid Social Protection Floors? The Role of Non-Contributory Provision during the COVID-19 Crisis and Beyond. Social Protection Spotlight.
- d** Durán Valverde, Fabio, José Pacheco-Jiménez, Taneem Muzaffar, and Hazel Elizondo-Barboza. 2020. Financing Gaps in Social Protection: Global Estimates and Strategies for Developing Countries in Light of COVID-19 and Beyond. Working paper. Geneva: International Labour Office.

the SDGs; and only then will public policy incentivize investments fully aligned with the SDGs (see chapter III.B).

**For SDG risks to be addressed, they first need to be disclosed.** Countries are increasingly embedding previously voluntary sustainability-related disclosures (particularly for climate risks) in legislation and regulations for large corporations. Large corporations have made progress on disclosures, particularly on climate-related disclosures. Nonetheless, reporting remains fragmented, with companies reporting varying levels of data using different standards and indicators, often on a voluntary basis, which undermines both the quantity and quality of information. Corporate reporting needs to be further enhanced through norm-setting and standardization, mandatory reporting measures, going beyond financial material risks, consistently addressing all SDG impacts (see chapter III.B).

**Additional proactive measures can further facilitate the low-carbon and sustainability transition in financial markets.**

Beyond SDG and ESG risk disclosure, minimum standards or taxonomies for sustainable financial products can provide more clarity and certainty

on sustainable investment opportunities to investors with sustainability preferences. Investment advisers could be mandated to ask clients about sustainability preferences; crisis support can be linked to ESG reporting requirements; and some central banks are considering integration of environmental, social and governance criteria into their portfolios to address the “tragedy of the horizon”—for instance, by considering carbon intensity in bond purchasing programmes (see also chapters II.B and II.F).<sup>50</sup>

**All public policy efforts to reduce and share investment risk must take into account economic, social and environmental risks.** This is primarily a challenge of policy coherence. Efforts to improve the enabling environment must not come at the expense of social and environmental objectives. Instead, taxes, regulations and other pricing mechanisms (e.g., carbon pricing, bans of single-use products, or requirements to conduct supplier due diligence on forced labour and related social risks) should serve to internalize environmental and social risks.

**Risk-sharing instruments should only be used when investments contribute to public policy objectives and SDG progress.** As noted, risk-sharing instruments raise resources for investment that would not be

## Box II.7

### Public development banks and risk

There are more than 450 Public Development Banks (PDBs) in the world, distributed across every region, operating at local, national, regional, international or multilateral levels. They are significant players, providing funding of about \$2.3 trillion annually, or 8 to 10 per cent of global public and private investments.<sup>a</sup> Successful public development banks combine three attributes: (i) they are owned, controlled or supported by Governments; (ii) they execute a public, development-oriented mandate, addressing market inconsistencies; (iii) they enjoy independent legal status and financial autonomy, and maintain financial sustainability.

#### Public development banks and SDG risks: three roles

Their development mandates and backing by the public sector allow development banks to take on **macro-relevant risks**. By providing **countercyclical responses** during times of crisis, public development banks can reduce countries’ exposure and vulnerability to financial crises and, ultimately, the impact crises have on development. This countercyclical role contributed to restoring financial and economic stability during the 2008/2009 global financial and economic crisis. During the COVID-19 crisis, large development banks in particular were able to provide urgent support to health systems and economic activity more generally, with some doubling their funding volumes to support the most affected sectors and businesses and maintain employment. Development banks can play this role because of their longer time horizons and more stable funding sources.

Public development banks can play a **compensating and catalytic role in countries with underdeveloped financial markets**. Perceived risk remains high in a number of countries, making the private sector reluctant to invest. This perception is fueled by the general lack of knowledge about these markets, and by the difficulty of pricing risks accurately in the absence of sufficient market references, reporting systems on credit defaults, or independent assessments of credit risks. Development banks can fill these gaps. Multilateral development banks and climate

funds can provide targeted support to public development banks operating in such countries, and in supporting the emergence of new national PDBs. More broadly, collaboration of national and multilateral banks, through capacity development, co-financing and/or on-lending arrangements, can enhance SDG-related finance through the complementarity of international resources and local market knowledge.

By providing longer-term funding than commercial banks, PDBs can better **align their risk considerations with social and environmental sustainability**. Governments have long used PDBs as important financing tools to implement their national economic and social policies—especially to directly finance large infrastructures, to foster economic growth, and reduce poverty. More recently, many development banks also strive to crowd in private investment (domestic and international), to increase the scale and development impacts of private financial flows, and to foster capital market development, through blended finance and other forms of alternative finance. In this latter role, they also aim to align markets with the SDGs and the Paris Agreement and to increase societal resilience, through enhanced levels of standards for all investors. They can do so through direct funding and by leading financial markets with more environmentally and socially stringent and demanding investment criteria. By aligning their operations and activities to the Sendai Framework for Disaster Risk Reduction, development banks can also ensure that their lending supports risk reduction. During the Finance in Common Summit, held in Paris in November 2020, regional association of public development banks agreed on key principles for aligning their strategies with the 2030 Agenda for Sustainable Development, including in areas such as energy transitions and existing coal financing, strengthening “cause no harm” policies on biodiversity, and on increasing access to affordable and accessible essential services such as education, housing or health.

**Source:** IDFC.

**a** A comprehensive database developed by the Institute of Structural Economics (INSE – University of Peking) and the French Development Agency (AFD) is available at <https://afdshiny.shinyapps.io/developmentbanksdatabase/>.

## Box II.8

### The market for political risk insurance

Political risk has long been an important consideration for private sector investors operating in developing countries. The ability to protect against (i) expropriation, (ii) breach of contract by a sovereign, (iii) currency inconvertibility, and (iv) war and civil disturbance are important factors for investors with significant debt and equity positions. With 10–30 year investment horizons for large infrastructure, energy and financial service projects, most are unable to effectively manage political risk using their own balance sheet. In response, political risk insurance offers a capital-efficient method to transfer these risks to organizations that can pool exposures from across a portfolio of countries and regions.

The political risk insurance market is made up of three types of insurance providers: private insurers (commercial markets), export credit agencies (ECAs), and multilateral development institutions. Private insurers are profit-oriented and typically offer coverage with maximum tenors of 10–15 years and limits of \$50 million to \$100 million per insured risk. Tenors and coverages for ECAs can vary significantly. Most ECAs operate under an explicit mandate to primarily cover investors from their country of origin. Depending on their specific mandate, ECAs are required to be financially self-sustainable. Multilateral insurers, most notably the Multilateral Investment Guarantee Agency (MIGA), have an explicit development mandate and, in the case of MIGA, cover investments in both middle-income and especially lower-income countries and fragile and conflict-affected States. By doing so, MIGA acts as an *insurer of last resort* covering risks that in complexity, risk profile, tenor and size are outside of the appetite of private markets. As a benefit of being part of the World Bank Group, MIGA is well positioned to pre-emptively address emerging political risks through direct engagement with its sovereign or subsovereign counterparties. This form of *pre-claims management* avoids lengthy arbitration and allows projects to continue to perform without disruption. Since its creation, MIGA has been able to resolve the overwhelming majority of potential political risk situations without arbitration or a claim, thereby ensuring the continuation of critical development projects and strengthening investor confidence in emerging markets.

Over the last decade, the market for political risk insurance has seen steady growth. MIGA, for instance, has increased its capacity from \$2.5 billion in annual issuances to an average of \$5 billion to \$6 billion. Reinsurance is an important enabler of that capacity growth, allowing carriers like MIGA to scale its impact across a broader set of projects and geographies. Innovation in products such as expansion into credit enhancement has further broadened access to coverages that protect investors against losses resulting from a failure of a sovereign or subsovereign to meet financial obligations. Continued innovation and capacity growth have significantly expanded the role and relevance of political risk insurance in de-risking investment into emerging markets. As a capital effective instrument to enable private capital flows, a wider use of political risk insurance has the potential to unlock material incremental investments and accelerate progress towards achieving the Sustainable Development Goals.

**Source:** Multilateral Investment Guarantee Agency (MIGA).

sufficiently attractive for commercial investors without support. As they use public resources, they must be aligned with public policy goals, such as climate action and the SDGs. Instruments include junior equity, subordinated debt and guarantees to enhance risk-return profiles for commercial investors (e.g., the Global Subnational Climate Fund, where a first loss equity investment by the Green Climate Fund leverages investment for climate action at the subnational level); credit guarantees to local financial institutions, to cover them against losses in underserved markets; or insurance or hedging instruments to hold risks that they are better placed to manage than commercial investors, such as political risk insurance (see box II.8 on the role of Multilateral Investment Guarantee Agency (MIGA), and chapter III.B. of the *FSDR 2020* for a detailed discussion of such instruments). Blending structures have also been used to subsidize insurance schemes to enhance resilience of smallholder farmers and households—for example, through the Africa and Asian Resilience Disaster Insurance Scheme, which is co-funded by the InsuResilience Investment Fund. Depending on the type of risk, national or international institutions may be better placed to take on risks; risks that are systemic at the national level, such as currency risk or political risk, are better managed by international institutions that can diversify them.

## 4.3 International support and action

**Risk prevention, reduction and investments in resilience have a public good character, calling for global cooperation and international support for developing countries.** Systemic risks in particular have cross-border effects, and isolated national efforts to address them will not suffice. Both climate mitigation and the COVID-19 pandemic provide stark illustrations for the need for international cooperation, and for provision of support to developing countries with limited resources, not only in the spirit of global solidarity, but also in the self-interest of advanced countries. Such international support can both directly support sustainability and resilience of public finances and financial systems, and also contribute to financing for risk reduction, resilience and sustainability.

### Supporting sustainable and resilient public finances and financial systems

**International public finance can provide fiscal support in times of macroeconomic shocks, crises and disasters, and thus play a countercyclical role in enhancing resilient public financing.** Multilateral development banks in particular have historically been able to provide countercyclical financing, significantly extending their operations in developing countries in response to the global economic and financial crisis in 2008 and 2009 (see *FSDR 2019* and chapters III.C and III.E of *FSDR 2021*). They have also provided concessional financing to developing countries in need after the COVID-19 shock, frontloading disbursements. In contrast, some bilateral official development assistance providers have acted procyclically by reducing aid allocations, due to fiscal pressures at home (see chapter III.C). The international community has also set up or supports a range of quick-disbursing financing instruments that can provide rapid fiscal support in the event of a disaster or pandemic (see box II.9).

**Financial systems have proven more resilient to the COVID-19 shock than to the global crisis in 2008 and 2009, and international financial markets have recovered quickly from the March turmoil, while many developing countries face significant liquidity**

**pressures.** Major banks had better capital and liquidity positions, allowing them to absorb the macroeconomic shock rather than to amplify it. Nonetheless, other fault lines have emerged, particularly in the non-bank financial sector, which has become a major source of systemic risks, and warrants continued attention by regulatory policymakers (see chapter III.F). At the same time, many developing countries have faced liquidity pressures due to the current crisis, as they remain vulnerable to the fluctuations of cross-border financial flows. Strengthening the global financial safety net, and increasing IMF capacity for concessional lending and provision of liquidity support (e.g., through a substantive issuance of special drawing rights) remain a priority (see chapter III.F).

### International cooperation and support for sustainability and resilience

**Strengthened international cooperation is also required for investments in risk reduction and resilience, which remain severely underfunded.** It is a shared interest of all countries to spend more and to spend better on global risk prevention and preparedness, and to address the increasingly systemic nature and unequal distribution of risk, while also supporting national efforts for risk reduction in developing countries. But such investments are often crowded out by more immediate short-term or domestic concerns, because of their global public good character.<sup>51</sup> Pandemic preparedness and climate change mitigation are two examples of such global public goods: they affect all or most countries and people, and cannot be provided by any one country alone, but rather require global cooperation. This entails not just additional financing, but also strengthened and more inclusive global governance.

**More public investment is needed.** Investment in pandemic preparedness and response has been insufficient, despite increased mobilization after the 2014–2016 Ebola crisis.<sup>52</sup> Despite efforts by entities such as the Coalition for Epidemic Preparedness Innovations, Gavi, the Vaccine Alliance, the World Health Organization (WHO) and others, investments in research and development for vaccines and other preventative interventions remain a small share of overall health spending globally, and continue to be characterized by a cycle of panic and neglect.<sup>53</sup> Markets dramatically underinvest in this area. The COVID-19 crisis highlights the enormous output losses associated with slow global vaccination progress and makes a clear case for greater public investment, including in COVAX, the vaccines pillar of the ACT-Accelerator. And while total public climate finance provided by developed countries has increased in recent years to reach \$63 billion in 2018 (see chapter III.C), it pales in comparison to the vast investment needs for transitioning the global economy onto a low-carbon path. Developed countries' commitments made under the Paris agreement to transfer resources to finance objectives beyond mitigation, including adaptation, regulations, information-sharing and technology transfer, must also be met. Such transfers are critical to accelerate policies supporting decarbonization in developing countries.

**Beyond additional funding, the international architecture should be revisited.** Systemic risks are characterized by cross-domain effects. As a result, they do not fall within the responsibility of a single organization, neither nationally, nor at the global level. Increasing the voice of the most vulnerable groups and countries—those with the

least agency to reduce global risks but most vulnerable to shocks and disasters—is a second imperative. International cooperation must be further strengthened in these two dimensions; but both are challenging to address, as they require bringing together different communities of expertise and practice, and overcoming significant power imbalances. They require a “reinvigorated multilateralism,” as recognized by States Members of the United Nations in the Declaration on the commemoration of the seventy-fifth anniversary of the United Nations,<sup>54</sup> with a strengthened United Nations at its centre, due to its convening power and capacity to address sustainable development, climate, peace and security, and humanitarian considerations in a coherent, complementary and collaborative manner.

**Development cooperation can also support developing countries in addressing risk and building resilience, including by strengthening national capacities and country systems that are able to respond to shocks and crises.** Government capacity has been a key determining factor of the effectiveness of countries' response to the COVID-19 pandemic.<sup>55</sup> Development cooperation has a key role to play in building such capacities—in national health systems, social protection systems, or crisis response systems, for example. INFFs could serve as a tool to align such support with national priorities and needs.

**Support for national pandemic preparedness increased after 2015, but remains insufficient.** The Joint External Evaluation (JEE) mechanism, set up by WHO in 2016, allowed for identification of critical gaps in preparedness. Yet, despite the low cost of enhancing pandemic preparedness (estimated at less than 2 dollars per person per year to reach acceptable levels), recipient-country expectations for additional support after JEE gap assessments have not been fully met.<sup>56</sup> Resilient national health systems are a second line of defence. Development cooperation continues to play an important role in this area, responsible for almost a third of health spending in low-income countries; but specific support for health system strengthening, which is the basis for crisis preparedness and response, remains limited, at about 15 per cent of overall support for health.<sup>57</sup>

**Climate adaptation and disaster risk reduction remain severely underfunded.** Annual adaptation financing needs are estimated to range between \$140 billion to \$300 billion by 2030.<sup>58</sup> Yet, such investments in the adaptive capacity of vulnerable populations, including women, girls and people living with disabilities, are even more underfunded than other global priorities, such as climate mitigation. Reporting on official international support for disaster risk reduction also remains inconsistent, despite the introduction of the Organization for Economic Cooperation and Development/Development Assistance Committee (OECD/DAC) disaster risk reduction marker. Climate adaptation and disaster risk reduction activities face a dual challenge: they rely more on global solidarity than mitigation finance, which is in the direct interest of all countries, and they tend to rely more on public finance, as they are often not associated with revenue streams. Participatory and tailored approaches are particularly important in climate adaptation and disaster risk reduction projects, so that they can respond to the specific needs of vulnerable local populations.<sup>59</sup>

**Financing mechanisms can be designed to further support rapid and effective national crisis response.** The Ebola crisis has spurred development of pandemic emergency financing facilities, building on

experiences from the climate and disaster world. Such quick-disbursing mechanisms can provide rapid and predictable financing, and are thus a useful complement to domestic funding and other forms of international support. However, not all mechanisms have stood the test of COVID-19, providing important lessons for their effective design (see box II.9).

### Box II.9 Quick-disbursing financing mechanisms and risk-transferring instruments

The international community has developed a range of mechanisms—quick-disbursing grant or debt financing, contingent instruments, and insurance mechanisms—to support countries in their response to economic and non-economic shocks and disasters. This includes the set of bilateral and multilateral arrangements and institutions that comprise the global financial safety net (see section 4.3 of chapter II and chapter III.F of this report, as well as disaster financing mechanisms for humanitarian emergencies and for disasters that are growing in frequency and intensity due to climate change. In response to the 2014–2016 Ebola outbreak, the latter were expanded and complemented to also cover pandemics.<sup>a</sup>

Instruments include:

- Grant or loan financing provided in the immediate aftermath of disasters, for example, pooled funds such as the United Nations Central Emergency Response Fund (CERF), which includes rapid response grants; the International Development Association's Contingency Emergency Response Components and Crisis Response Windows, or contingent credit lines such as the World Bank's Catastrophe Deferred Drawdown Option (CAT-DDO); the World Health Organization Contingency Fund for Emergencies; or the International Monetary Fund Catastrophe Containment and Relief Trust;
- Risk financing and risk transfer instruments, which include regional risk sharing or risk pooling mechanisms such as the Caribbean Catastrophe Risk Insurance Facility (CCRIF) and the African Risk Capacity, and instruments to transfer risk, such as the insurance window of the World Bank's Pandemics Emergency Financing Facility, also known as pandemic bonds.

Their primary purpose is to provide rapid and predictable financing that reaches countries and populations in need early enough to avoid or minimize long-term consequences and scarring. They can provide Governments with needed liquidity for immediate response and recovery. In comparison to costly self-insurance, these international efforts aim to provide support to resource-constrained developing countries that

Building on these lessons, a new Early Response Financing (ERF) modality was introduced in IDA (starting on July 1, 2020 at the onset of IDA19) to provide early support for slow-onset shocks, and to enable early response to disease outbreaks and food insecurity events that are at an early stage of progression but have the potential to escalate into major crises.

is rapid, predictable and less fragmented than traditional support, and also allow for risk pooling and hence taking advantage of diversification of risk across geographies.<sup>b</sup>

Several lessons have emerged from their use over recent years. First, insurance schemes and associated premiums raise equity concerns; the most vulnerable—both households and countries—will not be able to afford them. Existing parametric insurance schemes and catastrophe bonds are expensive, with annual premiums estimated at 1.5–3.2 times of expected annual payouts for small island developing States, due to geographical risk correlations and thin insurance markets.<sup>c</sup> Concerns over premium costs have halted countries from joining regional risk sharing mechanisms. In some cases, donors have covered these premiums, and initiatives such as the Global Risk Financing Facility provide technical and financial support for risk financing and insurance mechanisms.

Second, parametric instruments and their triggers in particular can be challenging to structure, and private sector involvement overly costly. In the case of pandemic bonds, due to the design of the triggers, payouts were possible only more than three months into the pandemic, and thus came after the World Bank had committed IDA and IBRD funding to fight COVID-19—a slower response than traditional support and at a higher cost.<sup>d</sup> Parametric triggers have worked better when risks are well understood (as is the case for hurricanes covered by CRIFF), and parametric triggers are immediate.

Third, financing instruments should include both incentives and capacity-building efforts for investments in planning, improving data and tracking systems, preparedness and prevention.

**Source:** UN DESA.

<sup>a</sup> OECD. 2020. Strengthening health systems during a pandemic: The role of development finance. Available from: <https://www.oecd.org/coronavirus/policy-responses/strengthening-health-systems-during-a-pandemic-the-role-of-development-finance-f762bf1c/>.

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