

13

SDG17, means of implementation: strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

HOLLY JARMAN

13.1 Introduction

Sustainable Development Goal 17, to ‘strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development’ (United Nations, 2022) is a little different from some of the other goals covered in this book. At first glance, you would be forgiven for thinking that SDG17 is a ‘grab bag’ of aspirations; that it covers everything not covered by the other goals. Its scope is very broad, covering finance, taxation, debt and capital flows, governance and multi-stakeholder partnerships, international trade and aid, technology diffusion, shared knowledge, shared data, capacity building and national planning (United Nations, 2022). SDG17 has a history of conceptual slipperiness, and even its fundamental definition can change in different contexts. Some sources emphasize SDG17’s reference to the “means of implementation” foregrounding the financial and technical capabilities seen as necessary to achieve sustainable development (Eurostat, 2022; United Nations, 2018). Others elaborate on the theme of partnership and translate this into literal multi-stakeholder partnerships for facilitating or renewing sustainable development (Addo-Atuah et al., 2020; Leal Filho, 2022; Oliveira-Duarte et al., 2021).

What is strange in terms of policymaking is that it is rare to find so many big, important policy areas addressed in one policy framework. Where the norm in policymaking is most often to have a strong segregation between “core” (often economic) policy areas and aspects of social and environmental policy, SDG17 has the potential to force governments, including health ministries, to consider how these policy areas interact and influence one another. From this standpoint, SDG17 is a potentially great

framework to consider co-benefits, the intersectoral positive spillovers between health and other policy areas. It can be viewed as a means of facilitating some of the cooperation across policy areas that we are told is much needed (see Chapters 1–4 of this volume; Greer et al., 2022a), and of better understanding (and even mitigating) negative intersectoral spillovers.

But also because of its breadth, SDG17 might be one of the most ambitious SDGs. In order to make progress towards SDG17, states need to work together to create more equitable systems for trade, aid, debt and knowledge sharing at the global level as well as improve the governance and administrative capacity of individual states and their relationships with third party stakeholders and civil society groups. This is a tall order. There could be a significant risk that SDG17, defined too concretely, might not be achieved on any reasonable timeframe, or at all. SDG17 balances out its ambition by keeping its goals vague, aspirational and sometimes hard to measure. In terms of allowing countries to work together over the longer term, this could be an advantage. Each can claim progress without seeming to have “failed” to reach certain benchmarks or milestones. That flexibility can enable promises but leaves the risk of delivering very little, with no ability for third parties to hold governments to account when they fail to deliver on their promises.

This chapter examines the wide-ranging and often poorly defined SDG17 in the context of health policy and governance. Health policies and systems, including public health policies, as well as the general state of population health, affect the key components of SDG17 in important ways, from facilitating trade and economic growth to using the power of health care systems as large purchasers and employers. How can health policies and systems provide co-benefits that contribute to achieving goals from SDG17?

I argue that there are significant synergies between health policy and SDG17. Many of the factors that potentially make “sustainable development” possible require healthy populations and functional health systems. Just as factors like trade and capital flows, good enough governance, a clean environment, or access to technology are very important determinants of health, good population health and the systems that make that possible are essential for achieving sustainable development. The COVID-19 pandemic has made these synergies very visible across the world, in terms of both the importance of international cooperation as well as the consequences of its failure. I argue that none of the

potential co-benefits can be achieved without health actors at the table, as the pandemic makes clear. The next sections examine the content of SDG17 and explore the co-benefits with health, before placing the framework in the context of the COVID-19 pandemic.

13.2 What does SDG17 cover? What are the co-benefits between these areas and health?

SDG17 covers a lot of ground and might seem confusing (see Table 13.1), but it is actually a very strong embodiment of the key tenets of “sustainable development” (Sachs, 2015). On the one hand, its core priorities are mostly economic, including trade, investment, capital flows, aid and debt relief. But while the SDG promotes and centres economic growth, it does not promote just any growth. In each of these areas of economic policy, consideration is given to how a mixture of multilateral cooperation and enhancing national capacity can create more stable growth over time that is more equally distributed among states. In order to further these goals, SDG17 includes a range of areas that could be considered technical improvements to existing systems, such as improving technology

Table 13.1 *The main elements of SDG17*

| Element | Policies |
|-----------------|---|
| Finance and aid | Overseas development assistance Foreign direct investment (and investment promotion schemes) Remittances Debt financing, relief and restructuring Government revenue and ability to collect taxes Maintain stable macroeconomic climate, e.g., reduce boom and bust, rapid capital flows |
| Trade | Promote a “universal, rules-based, open, non-discriminatory and equitable multilateral trading system” Significantly increase exports of developing countries Reduce tariffs for developing countries, Least Developed Countries and small island states |

Table 13.1 (Cont.)

| Element | Policies |
|--|--|
| Governance, capacity building and multi-stakeholder partnerships | <p>Technical and financial assistance</p> <p>“Enhance policy coherence of sustainable development”</p> <p>Respect each country’s policy space and leadership to establish and implement policies for poverty eradication and sustainable development</p> <p>Promote multi-stakeholder partnerships</p> <p>Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries</p> <p>Promote effective public–private and civil society partnerships</p> |
| Access to science, technology and innovation | <p>Internet and broadband access</p> <p>Knowledge sharing agreements</p> <p>Improve access to environmentally sound technologies, e.g., via technology transfer</p> |
| Data | <p>Enhance statistical capacity, create national statistical plans, improve birth and death records</p> <p>By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries</p> |

transfer and dissemination of scientific knowledge in ways that can foster growth. Improving government capacity to govern is also addressed, for example, a state’s ability to keep records, share data or collect taxes.

As such, the main critiques of SDG17 are those that apply to the concept of sustainable development itself – the objectives outlined by SDG17 are more often about “greening” the global economic system or redistributing its benefits rather than reconstituting the system in any significant way (Lafferty, 1996; Mitlin, 1992; Weber & Weber,

2020). While sharing the benefits of growth more equally among states is a key goal, SDG17 does not explicitly centre equity and focuses on differences between countries rather than inter-population disparities. From this perspective, SDG17 is more about politics than power. States aspire to “respect each country’s policy space and leadership” (Target 15) and promote “multi-stakeholder partnerships that mobilize and share knowledge” (Target 16) rather than reform the ways that governments vote or create multilateral institutions focused on massive wealth redistribution, for example.

The objectives in SDG17 and their associated measurements can seem vague and incoherent – one of the targets is itself to “enhance policy coherence of sustainable development” (Target 14), measured by the “number of countries with mechanisms in place to enhance policy coherence of sustainable development”. Nevertheless, examining the key themes within SDG17 collectively makes clear their importance to each other, and the importance of health policies, health care and the health system to them.

For anyone who pays attention to population health, one ongoing frustration stems from the fact that many aspects of health are determined by policies and systems outside the health domain (Evans, Barer & Marmor, 1994; Marmot & Allen, 2014). That explains why there is an extensive literature on the ways in which elements of SDG17 such as trade policy affect health systems and outcomes. To be healthy, people need access to adequate amounts of healthy, sustainable and culturally appropriate food, for example. While mass manufacturing and liberalized trade can increase food availability, it is not guaranteed that the new food will be nutritious, produced in environmentally sound ways, or a good fit with local ways of eating and procuring food. Changes in trade patterns on Pacific islands leading to an influx of cheap, high-calorie food and related advertising have been shown to impact local diets in negative ways (Friel et al., 2013; Hughes & Lawrence, 2005; MacKenzie & Collin, 2012; Snowdon & Thow, 2013; Thow et al., 2010). Furthermore, market liberalization can create an influx of, and demand for, new, unhealthy goods such as tobacco products and undermine related public health policies in important ways (Crosbie et al., 2021; Drope & Lencucha, 2013; Jarman, 2015, 2019; Lee et al., 2009; McGrady, 2011; Shaffer, Brenner & Houston, 2005). In addition to impacting the flow of goods, changes in trade can also structure employment opportunities and related population flows in ways that

shape working environments, living conditions and social structures. While work can be vital to live, the nature of work affects quality of life in significant ways. Increasing the volume of trade does not guarantee equitable distribution of its profits and may increase inequities over time. Good population health thus relies not just on economic growth but also on how the benefits of growth are distributed (Marmot et al., 2010, 2020; WHO Commission on Social Determinants of Health, 2008).

Understanding the inverse relationship – the impact of health on SDG17 – is equally important (Table 13.2). Achieving any measure of global economic equity without progress in global health equity seems unlikely. Populations in poor health – with either higher mortality rates and/or higher morbidity – cannot contribute as much towards the global economy in terms of labour, productivity and innovation. The global burden of communicable and non-communicable disease is a barrier to sustainable growth, as are barriers to accessing needed health care, whether preventative, routine or urgent (GBD 2019, 2020). States do not create and maintain health systems purely out of altruism or a sense of upholding rights to health, although this may be part of their justification. Adequate health care that is accessible at the point of need and not unduly costly or burdensome is a key component of a successful economy. So, too, are the public health structures that detect, and aim to prevent, the spread of communicable disease (Acemoglu & Johnson, 2007; Alkire et al., 2018; GBD, 2020; Remes et al., 2020; Sharma, 2018).

Good population health and health care access support the global economy. But the health sector itself can also be a source of economic benefits and employment. In many countries, the health sector provides a significant number of jobs, fosters new research and disseminates scientific knowledge. Health sectors in EU countries, for example, have been shown to produce high added value and significant employment, despite being relatively independent of other sectors in the economy (Gutiérrez-Hernández & Abásolo-Alessón, 2021). In addition, most health organizations, both those funded by governments and those funded by private spending, exist as part of services and goods trade within the global economy. In 2019, prior to the COVID-19 pandemic, the top five exporting countries in pharmaceuticals accounted for \$319.68 billion in exports, while the top five countries exporting medical devices accounted for \$126.71 billion (Skrzypek, 2020). In terms of trade in services, WHO projects that increased health care demand will

Table 13.2 *Potential co-benefits from good population health and the health sector for achieving SDG17*

| Element | Population health potential co-benefits | Health sector potential co-benefits |
|--|--|--|
| <p>Finance and aid Overseas development assistance; foreign direct investment (and investment promotion schemes); remittances; debt financing, relief, and restructuring; government revenue and ability to collect taxes; maintain stable macroeconomic climate, e.g., reduce boom and bust, rapid capital flows</p> | <ul style="list-style-type: none"> • Facilitates workforce participation and productivity, supporting overall economic growth and government revenue • Physically and mentally healthy workforce and absence of communicable diseases in the population provide value to businesses and investors • Investment and aid are more likely to result in growth when population is healthy | <ul style="list-style-type: none"> • Prevention of communicable disease spread, e.g., vaccination, can support economic stability • Fewer disruptions to economic activity, greater productivity when workforce can access health care • Businesses benefit from collectively funded and managed health systems |
| <p>Trade Promote a “universal, rules-based, open, non-discriminatory and equitable multilateral trading system”; significantly increase exports of developing countries; reduce tariffs for developing countries, Least Developed Countries and small island states</p> | <ul style="list-style-type: none"> • A healthy workforce is an essential part of the infrastructure required to trade successfully • Controlling communicable disease outbreaks prevents supply chain disruptions | <ul style="list-style-type: none"> • Trade in health services can be a source of economic growth • Can be a source of profitable exports, e.g., trade in pharmaceuticals and medical devices |

Governance, capacity building and multi-stakeholder partnerships

Technical and financial assistance; “Enhance policy coherence of sustainable development”; respect each country’s policy space and leadership; promote multi-stakeholder partnerships; enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships

- Healthy population facilitates civic engagement and multi-stakeholder partnerships
- A healthier population is better able to hold policy decisionmakers and political leaders to account
- Healthier populations may be better able to participate in global partnerships and policy spaces
- Healthier populations may be better able to take advantage of technical and financial assistance
- Health sector contains many examples of successful multi-stakeholder partnerships
- Health systems are key partners in progress towards sustainable development

Access to science, technology and innovation

Internet and broadband access; knowledge sharing agreements; improve access to environmentally sound technologies, e.g., via technology transfer

- Healthy people may have more ability to engage in education and training
- Fosters new research, disseminates scientific knowledge
- Innovation in new health products and services supports economic growth and innovation in other sectors

Table 13.2 (Cont.)

| Element | Population health potential co-benefits | Health sector potential co-benefits |
|---|--|---|
| <p>Data Enhance statistical capacity, create national statistical plans, improve birth and death records; by 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries</p> | <ul style="list-style-type: none"> • A healthy population supports statistical and analytic capacity within a country | <ul style="list-style-type: none"> • Health sector is a source of expertise on population statistics and analysis • Health sector generates data of value to governments, businesses, researchers and civil society (see Chapter 9) |

result in 84 million health care jobs, mostly in high- and middle-income countries, by 2030 – a 29% growth rate (Boniol et al., 2022). This is a demand rich countries will try to meet with a combination of domestic investment and foreign recruitment, including international medical education (for example, French students studying medicine in Romania or German students studying dentistry in Austria). Across eight European countries in a recent study, the number of foreign-trained doctors increased by over 46% between 2010 and 2018 (Williams et al., 2020).

Overall, these examples show how interconnected population health, health care and the global economy really are, but they also point to the challenges that this poses for sustainable development. For example, is increased health care professional mobility a good thing? Recruitment of foreign health care workers can help to meet workforce needs in high-income countries but may cause “brain drain” in countries with limited capacity to train new doctors and nurses (Wismar et al., 2011). As commercial actors, pharmaceutical companies can create big profits and support growth and innovation, but the products they create may not match the need for more basic medicines and may not be accessible for poorer countries due to cost and strong intellectual property protections that limit the production of generic medicines. What happens to health markets when governments spending a significant proportion of GDP on health care come under pressure to reduce spending and government debt? Or to our understanding of contemporary health problems when commercial actors collect and maintain more relevant health data than governments? Is it possible within the constraints of this SDG to improve equity within national borders?

As such, the co-benefits between SDG17 and health may not be attained without integrating people who understand health care and the drivers of population health into spaces designed for economic policymaking (Jarman & Koivusalo, 2017; Koivusalo, 2014). But the process for making decisions on economic issues including taxation, industrial policy, trade, debt, investment or intellectual property is frequently divorced from the governance of health policy (Jarman, 2017). A degree of alignment and common discourse between actors responsible for the economic components of SDG17 and health policy stakeholders is likely needed to achieve meaningful progress.

In the text of SDG17, much of the weight of this integration is carried by the concept of a “multistakeholder partnership”, driven by the central assumptions that 1) bringing organizations from multiple

sectors and perspectives into dialogue will create “policy coherence” across issue boundaries and 2) effective policy implementation requires the knowledge, data and financial resources of actors outside the realm of government. As such, the concept is part of an intellectual framing that has long been part of how the WHO operates (Yamey, 2002).

Decisions about forming partnerships need to be handled carefully. Studies of the commercial determinants of health show that while bringing in actors with vested interests might potentially make policies more coherent, companies with vested interests tend to push policy debates towards ineffective or weak solutions such as industry self-regulation (for a summary, see Maani et al., 2020; Maani, Petticrew & Galea, 2022). Companies, by definition, are designed to support the interests of their shareholders over the concerns of health advocates, and a range of firms producing products such as tobacco, alcohol, food, pharmaceuticals and cars have had damaging effects on policies meant to protect health.

Nevertheless, having health actors, particularly public health actors, engaged in multi-stakeholder partnerships is essential for meeting the goals of SDG17; they can do much more than just block bad policy ideas. Health partners can promote policy coherence in service of sustainable development by bringing an understanding of how human health facilitates or puts at risk sustainable growth, an appreciation of the cross-border nature of many of these determining factors, a range of robust methods for collecting and disseminating comparable and reliable data, and a longstanding body of evidence supporting preventative actions to improve health before problems develop.

The next section explores this question of alignment in the context of the ongoing COVID-19 pandemic, with specific focus on sustainable food systems, collaboration to develop and distribute vaccines, and the collection and sharing of relevant health data.

13.3 How have we performed on SDG17 during the COVID-19 pandemic?

The COVID-19 pandemic has shown us just how much the connections between sustainable development and health matter, but also, unfortunately, how weak global cooperation can be during a crisis. Health policies adopted as responses to the COVID-19 pandemic have impacted performance across all areas of SDG17 (see Table 13.3). Although many in the international community have called for “global solidarity” in

Table 13.3 *Elements of SDG17 in the context of the COVID-19 pandemic*

| Element | Importance of SDG element to pandemic response | Health sector importance to SDG element | Impacts of pandemic response on SDG element |
|-----------------|--|--|--|
| Finance and aid | Required by low resource countries to buy medicines/equipment and for staffing; required to keep populations healthy during economic downturn; required to prevent widening inequality | Healthy populations support stable financial systems; health sectors support related growth and can provide revenue | Pandemic response impacts economic stability and performance, which can affect governments' and investors' ability or will to provide finance/aid or individuals' ability to send home remittances; travel bans, supply chain disruptions and lockdowns may impact ability to disperse aid; focus on pandemic-related aid/finance may reduce pressure to provide routine aid/finance |
| Trade | Allows distribution of treatments and vaccines; vital for distribution of food and other immediate needs; supports economic growth and recovery | Healthy populations support growth in trade volumes; health systems can contribute to trade in services; the health sector is a source of innovative products for export | The extent to which a government takes action to curb disease outbreaks, its choice of policy actions and its support for the population through social policies has multiple cross-cutting effects on trade volumes and supply chain resilience, e.g., impacting domestic production for export, availability of imports, stability of global markets |

Table 13.3 (Cont.)

| Element | Importance of SDG element to pandemic response | Health sector importance to SDG element | Impacts of pandemic response on SDG element |
|--|---|--|---|
| Governance, capacity building and multi-stakeholder partnerships | Support procurement and distribution of treatments and vaccines, contact tracing capacity, testing capacity, health system capacity; creation, distribution and procurement of treatments and vaccines, regulation of treatments, vaccines and health care, social support for vulnerable populations | Health actors can improve success in multi-stakeholder partnerships with sustainability goals; health actors can provide frameworks that help to understand complex problems with interconnected causality, e.g., One Health | The emergency nature of pandemic response can permit governance failures and corruption, e.g., human rights violations, graft, or other abuses of power. If pandemic response takes the form of highly centralized decisionmaking, stakeholders may be excluded from governance processes or be unable to participate in partnerships due to loss of needed resources |
| Access to science, technology and innovation | Access to treatments, vaccines, testing materials, emerging knowledge about virus | Healthy populations support scientific research and innovation; health sector supports research and development | The quality of global COVID–19 pandemic response affects which countries and populations have access to relevant science and technology, e.g., innovative treatments and vaccines |
| Data | Share up-to-date information on virus outbreaks, response strategies, vaccine and treatment efficacy, robust case and death records and population statistics vital for understanding the scale of the pandemic | Public health and health care sectors can support open data sharing and dissemination of knowledge | Data collection, analysis and dissemination related to pandemic response presents opportunities to continue these activities after the pandemic abates, with the risk that the needed resources to do so are withdrawn when the pandemic ends |

response to the crisis, the reality of pandemic response at the global level has too often been economic and health nationalism rather than the multilateral and multisectoral cooperation envisioned in SDG17.

The COVID-19 pandemic, from its start, shows the interconnectedness of health and SDG17. COVID-19 was probably born of a specific food system (Box 13.1), was transmitted through the world via trade and travel linkages, and then showed the dependence of the international economy on health and health policies, both through the non-pharmaceutical interventions that drastically transformed countries in 2020 and through the importance of vaccine production and development.

First, the contribution of public health policy – in particular, One Health thinking – is visible in the origins and initial dissemination of the disease. The conditions under which the COVID-19 pandemic emerged highlight the need for sustainable development reforms to improve national and global food systems and protect the environment (see Box 13.1). A number of recent epidemics have been connected to zoonotic transmission. The ability for a contagious virus to cross over from an animal population to humans is connected to the sustainability of food supplies and how we interact with our environment, including how animals are kept, medically cared for, and transported, as well as related factors such as biodiversity loss and changing patterns of contact between wildlife, including insects, and humans. Whatever the origins of SARS-CoV-2, some of the underlying conditions that create opportunities for zoonotic transmission have not changed since the beginning of the pandemic. And due to the associated economic downturn, some may have worsened (WHO, 2021). The economic and health consequences of not addressing these conditions have been made crystal clear during the pandemic, making sustainable food supply chains a clear case of potential “co-benefits” – or potential “double disadvantages”, outcomes which undermine both sustainable development and health. Including health professionals in discussions about agriculture, food sustainability and biodiversity, particularly those with expertise in environmental health, epidemiology and virology, will be essential in tackling the causes and consequences of zoonotic transmission of disease and its potential spillover into human populations. To avoid further outbreaks of this kind requires investment in strong and sustainable public health systems that can provide a regulatory approach that focuses directly on the consequences for human health, rather than a technocratic elaboration on existing trade policy, which is more likely to restrict trade without preventing future health crises (Lee & Houston, 2020).

Box 13.1 The case of COVID-19 and food systems**Emma Willoughby, University of Michigan**

Following the speculation that COVID-19 emerged from a wet market in Wuhan, China, there has been renewed interest in the role of wildlife trade and zoonotic disease spillover. The wildlife trade purportedly generates immense wealth in places including Southeast Asia and Central Africa, and many point to the medicinal interests of those who practise traditional Chinese medicine as sources for increasing demand for wildlife meat and parts. However, there are other trade forces affecting wildlife trafficking and encouraging human settlement in forested areas.

In actuality, a majority of zoonoses emerge constantly and are not only linked back to wildlife markets. They are, however, connected to market forces. Some accounts attribute the 2003 SARS spillover to the wildlife markets themselves, but upstream this spillover first occurred between bats and intensive raising of palm-faced civets (McNamara et al., 2020). This story is similar to the emergence of Nipah virus from mainland Malaysia, where large pork farms were established bordering orchards which attracted large flying foxes (Breed et al., 2006). Pulliam and colleagues (2012) note that in particular, the intensive pork production provided an environment in which the virus could replicate and persist for years before leading to a full-scale outbreak.

In resource-rich countries where pressure to economically develop is high, there is demonstrable evidence that development brings settlement in closer proximity to wildlife. For example, researchers detail how mining and logging encampments expand to eventually form villages in areas that become fragmented forests, which are shown to support generalist species that may host a diversity of pathogens (Johnson et al., 2020; McNamara et al., 2020). Outbreaks of Ebolavirus variants have been linked to fruit bat encounters, and specifically bats which can survive in semi-domestic environments, not exclusively from bushmeat consumption (Marí Saéz et al., 2015). Rodents in mainland Southeast Asia have been shown to thrive in rice paddy environments and be a reservoir to a higher diversity of parasites (Bordes et al., 2013). Years of transformative agriculture and urbanization, land-use conversion and forest degradation all remain important contributors to zoonotic spillover (Bordes et al., 2013; Cui, Li & Shi, 2019; Jones et al., 2013). One Health is a collaborative approach incorporating the study and protection of human health, animal health and environmental health. Moving forward, researchers must consider the social transformations of the communities who are most vulnerable to economic demand and environmental stressors.

Second, while policy responses to the pandemic certainly reduced morbidity and mortality from the disease, they also shocked many economies. In terms of the elements of SDG17 that refer to finance, delivering a stable economic system, and trade, lockdown policies and fear of contagion dampened economic activity. Foreign Direct Investment (FDI) dropped in many countries during 2020 and 2021. Although the United Nations Conference on Trade and Development (UNCTAD) found that FDI recovered to pre-pandemic levels during 2022, the organization warned that the lingering effects of the pandemic, the war in Ukraine and climate disruption were likely to contribute to an ongoing poor investment climate (UNCTAD, 2022). This is particularly a concern for those countries which depend heavily on FDI, many of whom had been trying to increase investment as a development strategy prior to the pandemic. With less work for migrants in many places, and travel restrictions in place that often discriminated against non-nationals, remittances seem to have dwindled somewhat (although official statistics often did not reflect this decline as they do not track informal cash transfers) (Dinarte-Diaz, Jaume & Medina-Cortina, 2022; World Bank, 2022a). This was also most important in lower-income countries, where international remittances are a key source of income for many and can make up a significant proportion of GDP.

In terms of development finance specifically, concerns have been raised that many least developed countries (LDCs) are at risk of defaulting on their debt obligations, with the World Bank classifying over half as in debt distress or at risk of debt distress (World Bank, 2021a, 2022b). The pandemic was not the sole cause of this problem, but did exacerbate it. With the global economy in an uncertain state, interest rates and inflation ballooning, and many national economies shrinking rather than growing, debt distress becomes a much more significant concern. It is important to note that debt can be a consequence of a country trying to “develop” in sustainable ways, as sustainability requires infrastructure, which in turn requires investment. As FDI dwindles, private investment is not a substitute for public funds (Kharas & Dooley, 2021). Substantial debt relief will be needed in order to prevent countries in debt distress from defaulting, the consequences of which could be far-reaching and deliver a significant blow to any nascent recovery in the global economy (United Nations/DESA 2020). Debt relief could also, potentially, free up resources that could be invested in developing health systems, addressing both the pandemic and other ongoing, severe public health

crises in poorer countries. From May 2020 until December 2021, debt relief was provided to eligible countries through the Debt Service Suspension Initiative (DSSI), but continuing provision was subject to the political will of high-income countries. The DSSI was highly criticized as ineffective, as it deferred rather than cancelled debt payments, it did not cover private sources of debt, and only 48 out of 73 eligible countries elected to participate (Bretton Woods Project, 2022; World Bank, 2021b). Historically, this form of limited debt relief has not solved the economic problems of poorer states. More than that, requirements to make regular payments and conditionality attached to debts has often prevented adequate investment in infrastructure such as health systems (Khan & Shanks, 2020).

In terms of trade specifically, keeping trade routes open is vital to pandemic response in terms of ensuring a stable flow of both routine goods as well as distribution of needed treatments and vaccines. In the early stages of the pandemic, disruptions attributable to the spread of the virus as well as pandemic response meant that states reliant on single commodities were left vulnerable to pandemic-related price shocks, while those that relied on trade for essential supplies such as food and medicines were heavily affected by COVID-related supply chain disruptions (Barlow et al., 2021). The volume of global trade shrank significantly in 2020 as production and consumption were scaled back. Trade volumes recovered surprisingly well in 2021, although this recovery faltered in 2022, and the outlook for 2023 is likely to be impacted by ongoing inflation and the war in Ukraine.

In terms of Overseas Development Assistance, a significant form of aid specifically addressed by SDG17, the picture is less clear, as ODA statistics are published on a long delay. Emerging data for 2020 suggest that health ODA for that year, while substantial overall and higher than prior years, may have shifted towards COVID concerns at the expense of ODA for basic health needs such as support for UHC and basic nutrition – the sorts of policies that are considered essential within the SDG framework for meeting states' health goals (Wallace Brown et al., 2022). And as national governments face budget constraints, it can be electorally more palatable to focus cuts in ways that affect people in other countries, making ODA a prime target. In 2021, the United Kingdom drastically cut the amount of ODA it provides to other countries, ending a longstanding policy of movement towards the internationally recognized 0.7% GDP target. Other countries may

yet follow suit, with very concrete effects on health and wellbeing in lower-income countries that are still experiencing significant consequences from the pandemic.

The pandemic did not create many of these problems but has exacerbated existing vulnerabilities created by the global trade, investment and financial systems – existing vulnerabilities recognized in SDG17. The health sector can support sustainable economic growth and promote investment by providing necessary preventative, routine and emergency health care. Having a robust health sector with universal coverage lessens the burden of communicable and non-communicable disease on the whole of society with benefits for businesses and investors that include healthier and potentially more productive employees, fewer supply chain disruptions and fewer economic burdens relating to the provision of health coverage. Stronger health systems that could care for patients and administer vaccines, and social policy that could cushion the effects of NPIs clearly contributed to effective pandemic response (Greer et al., 2021a; Jarman, 2021).

Across trade, aid and finance, concerns are being raised that the pandemic experience and geopolitical tensions are creating pressure for states to become more isolationist, and move away from multilateral cooperation and multisectoral partnership as envisioned in SDG17. In several key areas of pandemic response, international cooperation has occurred, but has delivered mixed results. Vaccination against COVID-19 is a good illustration of this. In the early stages of the pandemic, rapid development of multiple effective vaccines for COVID-19 was a welcome surprise to many in the health sector (Saag, 2022). But distributing these vaccines was a different matter. As of February 2023, COVID-19 vaccines remain unaffordable and inaccessible for many low-income countries.

It was obvious long before the spread of COVID-19 that many countries would have to rely on international cooperation to deliver needed treatments and vaccines in the event of a large-scale pandemic (Fonseca et al., 2022). COVAX, for example, is a multilateral partnership between GAVI, CEPI and the WHO that was conceptualized as a means of ensuring the kind of multilateral, public–private cooperation enshrined in SDG17 in the area of COVID-19 vaccination. By 2022, COVAX had delivered a billion vaccine doses to 144 countries and territories, which is not a small feat. But here also, states acted in their own interests before acting to help others. Early in the pandemic,

high-income countries purchased a significant portion of the global COVID-19 vaccine supply, able to buy in such bulk that their orders were prioritized by manufacturers. This left other states to rely more heavily on multilateral mechanisms like COVAX, which were relatively slow to disperse vaccines in the early stages of the pandemic, or on bilateral donations from other states, which were likely to come with strings attached and be limited by geopolitical concerns. Furthermore, some of the vaccines distributed with geopolitical intent were shown to be less effective than others. Comparing Serbia with Ukraine, for example, Serbia accepted vaccines from Russia and China to supplement its own supplies and also donated some of these supplies to neighbouring states. Russian and Chinese donations were not politically acceptable in Ukraine, however, which was left to rely on supplies from COVAX that were slow to arrive. As a result of these supply constraints, and prior to the war with Russia, Ukraine vaccinated a much lower proportion of its population and experienced one of the slowest vaccination rates in Europe.

A further set of issues centres around governance and multisectoral partnerships. In a number of countries, in fact in most countries in Europe, a study found that horizontal multisectoral collaboration in response to the pandemic was eschewed in favour of central control by the executive (Greer et al., 2021b, 2022b). A number of health experts and agencies, rather than being brought into key conversations about policy, were excluded from the process as authority was centralized. This happened as the political salience of the pandemic increased, with national leaders sometimes unwilling to delegate decisionmaking power to public health agencies and experts (Greer et al., 2022b). Actors in the health sector were often excluded from decisionmaking, with predictable results – the double disadvantage of renewed disease spread and protracted lockdown measures impacting economic growth.

A final set of questions during the pandemic arose around the availability of relevant technology and data. The pandemic was a huge test of progress towards these types of collaboration under SDG17. Communicable diseases do not respect national borders, and so publicly sharing key data on disease spread, the presence of variants, and population health outcomes cross-regionally and cross-nationally, in a timely manner, as well as open access to research on the disease, becomes very important. The ability to share key data internationally rests in

part on the capacity within the health sector and government to gather and distribute data, as well as linguistic and technological barriers to interoperability. In a scenario where co-benefits are realized, health actors and the data they produce would facilitate policy decisionmaking on matters that affect not only health but also sustainable growth. In some places, this has occurred, with leaders making lockdown decisions based on available evidence. Regional, national and local public health agencies, non-profit organizations such as universities and think tanks, civil society groups, journalists and media outlets have all been central to promoting accessible data about the spread and effects of COVID-19, forming transnational, multisectoral partnerships. The presence of health actors in these partnerships is vital – they interpret data on disease spread and severity, evaluate treatments and vaccines, share research on new variants, formulate communications strategies and much more.

However, we can also point to examples of double disadvantages when it comes to sharing data. Some politicians have chosen to ignore relevant data, hoping the virus would go away, while others have actively suppressed access to information and sidelined health actors. In Brazil, for example, President Jair Bolsonaro sought to strongly downplay the impact of the pandemic. In June 2020, the Brazilian Ministry of Health removed public access to months of COVID-19 data, and ceased to publish the total number of confirmed cases (Mano, 2020). In the US state of Florida, data scientists employed by the state were pressured to manipulate COVID-19 statistics in ways that would downplay the impact of the virus and then asked to remove data from public view (NPR, 2020). In other cases, data have been framed in certain ways by individuals and groups working through media and social media channels, causing mis- and dis-information to proliferate. And in some places, a lack of investment in health infrastructure (for example, inadequate death registries, lack of testing or contact tracing, poor infrastructure for storing and sharing health data, few resources for public health messaging) hampers our ability to understand the true scale of the pandemic and compare pandemic responses cross-nationally. All of these factors have extended the pandemic; denialism and misinformation stoke vaccine hesitancy, increase distrust in governments, reduce compliance with public health measures and feed into poor policy decisionmaking. And the longer the pandemic runs, the greater its toll will be on economic growth.

13.4 Conclusion

SDG17 covers a broad range of policy areas that are considered vital in order to deliver on the other SDGs, including global economic stability and growth, the policies that fuel that growth, such as trade, aid and finance, multisectoral collaboration and governance, capacity building, and policies supporting access to science, technology and data. As this chapter shows, the co-benefits, or positive spillover effects between health and these other areas, are significant, and so are the potential negative spillover effects, or double disadvantages. The systems that support population health and wellbeing are a vital part of achieving sustainable development.

The COVID-19 pandemic has demonstrated the strong and important links between health, sustainability and the global economy, offering many examples of the essential role that health plays in making (co-benefits) or breaking (double disadvantages) progress towards SDG17. When health and sustainable growth goals align, good population health, resting on environmentally sustainable food chains, adequate support for public health systems, good access to health care, and good enough governance for health, can provide benefits to the global economy and help to move towards a model of sustainable development. Conversely, when population health is threatened – via the spread of communicable disease, increases in chronic conditions, poor access to health care, inadequate public health systems and underlying economic and social inequality – the goals of sustainable development can become unobtainable.

The COVID-19 pandemic shows, for example, how a widespread communicable disease can cause long-lasting economic disruption at a global scale as people withdraw from economic activity, and how the policy decisions adopted to control viral spread can impact the global economy. But it has also shown that the health sector, collaborating through multi-stakeholder partnerships that involve government finance and regulatory oversight, corporate and academic research, and global production chains, can deliver solutions – in this case, multiple safe and effective vaccines that protect against COVID-19, produced in record time. In turn, sound multilateral cooperation on key issues such as finance, trade, technology transfer and knowledge dissemination can provide the necessary funds to support health infrastructure in places where it is sorely needed. Building basic government capacity around

vital records, data sharing, budgeting and revenue collection can also support key health systems and outcomes. In a virtuous circle, better health infrastructure can form a foundation for more sustainable growth.

Realizing this vision – the co-benefits from integrating SDG17 and health and avoiding the double disadvantages – requires some urgent and some ongoing actions. Urgently, high-income countries and other donors must deepen their commitment to providing much-needed debt relief and increase (rather than cut) international aid to address the ongoing economic and social consequences of the pandemic. And while actions to increase access to COVID-19 vaccines outside high-income countries ramped up in spring 2021, current global vaccine distribution remains inadequate to fully control spread and is not serving the poorest countries. In the longer term, the pandemic speaks to the need to invest in public health systems that can detect and counter disease and chronic conditions, as well as in comprehensive, universal access to health care, no matter the location. Failure to do this leaves the global economy vulnerable to future shocks and ongoing suboptimal outcomes.

Collaboration around SDG17 and health can provide significant co-benefits, or, as the pandemic has unfortunately demonstrated, a failure to collaborate can produce double disadvantages, outcomes which simultaneously worsen sustainable development and population health. It is very important that we learn the lessons of this pandemic as soon as possible, because they are also the lessons we need to learn to address ongoing inequality in the global economy through SDG17.

References

- Acemoglu D, Johnson S (2007). Disease and Development: The Effect of Life Expectancy on Economic Growth. *J Polit Econ*, 115(6).
- Addo-Atuah J, Senhaji-Tomza B, Ray D et al. (2020). Global health research partnerships in the context of the Sustainable Development Goals (SDGs). *Res Soc Adm Pharm*, 16(11):1614–1618. (<https://doi.org/10.1016/j.sapharm.2020.08.015>; Epub 2020 Aug 27. PMID: 32893133; PMCID: PMC7449894)
- Alkire BC, Peters AW, Shrimel MG et al. (2018). The Economic Consequences Of Mortality Amenable To High-Quality Health Care In Low- And Middle-Income Countries. *Health Aff (Millwood)*, 37(6). (<https://www.healthaffairs.org/doi/10.1377/hlthaff.2017.1233>).

- Barlow P, van Schalkwyk MCI, McKee M et al. (2021). COVID-19 and the collapse of global trade: building an effective public health response. *Lancet Planet Health*, 5(2):E102–107.
- Boniol M, Kunjumen T, Nair TS et al. (2022). The global health workforce stock and distribution in 2020 and 2030: a threat to equity and “universal” health coverage? *BMJ Glob Health*, 7:e009316.
- Bordes F, Herbretreau V, Dupuy S et al. (2013). The diversity of microparasites of rodents: a comparative analysis that helps in identifying rodent-borne rich habitats in Southeast Asia. *Infect Ecol Epidemiology*, 3:10.3402/iee.v3i0.20178. (<https://doi.org/10.3402/iee.v3i0.20178>)
- Breed AC, Field HE, Epstein JH et al. (2006). Emerging henipaviruses and flying foxes – Conservation and management perspectives. *Biol Conserv*, 131(2):211–220. (<https://doi.org/10.1016/j.biocon.2006.04.007>).
- Bretton Woods Project (2022). Ineffective G20 Debt Service Suspension Initiative ends as world faces worst debt crisis in decades. (<https://www.brettonwoodsproject.org/2022/04/ineffective-debt-service-suspension-initiative-ends-as-world-faces-worst-debt-crisis-in-decades/>)
- Crosbie E, Defrank V, Egbe CO et al. (2021). Tobacco supply and demand strategies used in African countries. *Bull World Health Organ*, 99(7):539–540. (<https://doi.org/10.2471/BLT.20.266932>)
- Cui J, Li F, Shi ZL (2019). Origin and evolution of pathogenic coronaviruses. *Nat Rev Microbiol*, 17:181–192. (<https://doi-org.proxy.lib.umich.edu/10.1038/s41579-018-0118-9>)
- Dinarte-Diaz L, Jaime D, Medina-Cortina E (2022). Did remittances really increase during the pandemic? *World Bank Blog*, 11 July. (<https://blogs.worldbank.org/developmenttalk/did-remittances-really-increase-during-pandemic>).
- Drope J, Lencucha R (2013). Tobacco control and trade policy: Proactive strategies for integrating policy norms. *J Public Health Pol*, 34:153–164. (<https://doi.org/10.1057/jphp.2012.36>)
- Eurostat (2022). SDG 17 – Partnerships for the Goals. (https://ec.europa.eu/eurostat/statistics-explained/index.php?title=SDG_17_-_Partnerships_for_the_goals).
- Evans RG, Barer ML, Marmor TR (eds). (1994). *Why are some people healthy and others not?: The determinants of the health of populations*. Transaction Publishers.
- Friel S, Hattersley L, Snowdon W et al. (2013). INFORMAS. Monitoring the impacts of trade agreements on food environments. *Obes Rev*, 14(Suppl 1):120–134. (doi: 10.1111/obr.12081. PMID: 24074216)
- GBD (2019). Diseases and Injuries Collaborators. The Global Burden of Disease Study. *Lancet*. (<https://www.thelancet.com/infographics/gbd-2019>)

- GBD (2020). Diseases and Injuries Collaborators. Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet Glob Health Metrics*, 396(10258):P1204–1222. ([https://doi.org/10.1016/S0140-6736\(20\)30925-9](https://doi.org/10.1016/S0140-6736(20)30925-9))
- Greer SL, Jarman H, Falkenbach M et al. (2021a). Social policy as an integral component of pandemic response: learning from COVID-19 in Brazil, Germany, India, and the United States. *Glob Public Health*, 16(8–9):1209–1222.
- Greer SL, King E, Massard da Fonseca E et al. (eds). (2021b). *Coronavirus Politics*. Ann Arbor, MI: University of Michigan Press.
- Greer SL, Falkenbach M, Siciliani L et al. (2022a). From Health in All Policies to Health for All Policies. *Lancet Public Health*. (DOI: [https://doi.org/10.1016/S2468-2667\(22\)00155-4](https://doi.org/10.1016/S2468-2667(22)00155-4))
- Greer SL, Rozenblum S, Falkenbach M et al. (2022b). Centralizing and decentralizing governance in the COVID-19 pandemic: the politics of credit and blame. *Health Policy*, 126(5):408–417.
- Gutiérrez-Hernández P, Abásolo-Alessón I (2021). The health care sector in the economies of the European Union: an overview using an input–output framework. *Cost Eff Resour Alloc*, 19(4). (<https://doi.org/10.1186/s12962-021-00258-8>)
- Hughes RG, Lawrence MA (2005). Globalization, food and health in Pacific Island countries. *Asia Pac J Clin Nutr*, 14(4):298–306. (PMID: 16326635.)
- Jarman H (2015). *The Politics of Trade and Tobacco Control*. Basingstoke, UK: Palgrave.
- Jarman H (2017). Trade Policy Governance: What Health Policymakers and Advocates Need to Know. *Health Policy*, 121(11):1105–1112.
- Jarman H (2019). Normalizing Tobacco? The Politics of Trade, Investment, and Tobacco Control. *Milbank Q*, 97(2):449–479. (doi: 10.1111/1468-0009.12393)
- Jarman H (2021). State responses to the COVID-19 pandemic: governance, surveillance, coercion and social policy. In: Greer SL, King E, Massard da Fonseca E et al. (eds) *Coronavirus Politics*. Ann Arbor, MI: University of Michigan Press.
- Jarman H, Koivusalo M (2017). Trade and health in the European Union. *Research Handbook on EU Health Law and Policy*, 429–452.
- Johnson CK, Hitchens PL, Pandit PS et al. (2020). Global shifts in mammalian population trends reveal key predictors of virus spillover risk. *Proc Royal Soc B*, 287:2019273620192736. (<http://doi.org/10.1098/rspb.2019.2736>)
- Jones BA, Grade D, Kock R et al. (2013). Zoonosis emergence linked to agricultural intensification and environmental change. *Proc Natl Acad Sci USA*, 110(21):8399–8404.

- Khan M, Shanks S (2020). Decolonizing COVID-19: delaying external debt repayments. *Lancet Glob Health* (8)7:E897. ([https://doi.org/10.1016/S2214-109X\(20\)30253-9](https://doi.org/10.1016/S2214-109X(20)30253-9))
- Kharas H, Dooley M (2021). Debt distress and development distress: Twin crises of 2021. *Brookings Institute Global Working Papers*, 153 (March). (<https://www.brookings.edu/wp-content/uploads/2021/03/Debt-distress-and-development-distress.pdf>).
- Koivusalo M (2014). Policy space for health and trade and investment agreements. *Health Promot Int*, 29(Suppl 1):i29–47. (doi: 10.1093/heapro/dau033. PMID: 25217355)
- Lafferty W (1996). The politics of sustainable development: Global norms for national implementation, *Env Polit*, 5(2):185–208. (DOI: 10.1080/09644019608414261)
- Leal Filho W, Wall T, Barbir J et al. (2022). Relevance of international partnerships in the implementation of the UN Sustainable Development Goals. *Nat Commun*, 13:613. (<https://doi.org/10.1038/s41467-022-28230-x>)
- Lee A, Houston AR (2020). Diets, Diseases, and Discourse: Lessons from COVID-19 for Trade in Wildlife, Public Health, and Food Systems Reform. *Food Ethics*, 5:17. (<https://doi.org/10.1007/s41055-020-00075-4>)
- Lee K, Carpenter C, Challa C et al. (2009). The strategic targeting of females by transnational tobacco companies in South Korea following trade liberalisation. *Global Health*, 5:2. (<https://doi.org/10.1186/1744-8603-5-2>)
- Maani N, Petticrew M, Galea S (eds) (2022). *The Commercial Determinants of Health*. Oxford: OUP.
- Maani N, Collin J, Friel S et al. (2020). Bringing the commercial determinants of health out of the shadows: a review of how the commercial determinants are represented in conceptual frameworks. *Eur J Public Health*, 30(4):660–664.
- McGrady B (2011). *Trade and Public Health: The WTO, Tobacco, Alcohol, and Diet*. Cambridge: Cambridge University Press.
- MacKenzie R, Collin J (2012). Trade policy, not morals or health policy: The US Trade Representative, tobacco companies and market liberalization in Thailand. *Glob Soc Policy*, 12(2):149–172. (doi:10.1177/1468018112443686)
- McNamara J, Robinson E, Abernethy K et al. (2020). COVID-19, Systemic Crisis, and Possible Implications for the Wild Meat Trade in Sub-Saharan Africa. *Environ Resour Econ*, 1–22. Advance online publication. (<https://doi.org/10.1007/s10640-020-00474-5>)
- Mano A (2020). Brazil takes down COVID-19 data, hiding soaring death toll. *Reuters*, 6 June. (<https://www.reuters.com/article/us-health-coronavirus->

- brazil/brazil-takes-down-covid-19-data-hiding-soaring-death-toll-idUSKBN23D0PW)
- Marí Saéz A, Weiss S, Nowak K et al. (2015). Investigating the zoonotic origin of the West African Ebola epidemic. *EMBO Mol Med*, 7(1):17–23. (<https://doi.org/10.15252/emmm.201404792>).
- Marmot M, Allen J (2014). Social determinants of health equity. *Am J Public Health*, 104(S4):S517–S519.
- Marmot M, Allen J, Goldblatt P et al. (2010). Fair Society, Healthy Lives. Institute of Health Equity. (<https://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-the-marmot-review>)
- Marmot M, Allen J, Boyce T et al. (2020). Marmot Review – 10 Years On. Institute of Health Equity. (<https://www.instituteofhealthequity.org/resources-reports/marmot-review-10-years-on>).
- Massard da Fonseca E, Jarman H, King EJ et al. (2022). Perspectives in the study of the political economy of COVID-19 vaccine regulation. *Regul Gov*, 16(4):1283–1289.
- Mitlin D (1992). Sustainable development: a guide to the literature. *Environ Urban*, 4(1):111–124.
- NPR (2020). Florida Scientist Says She Was Fired For Not Manipulating COVID-19 Data. NPR Morning Edition, 29 June. (<https://www.npr.org/2020/06/29/884551391/florida-scientist-says-she-was-fired-for-not-manipulating-covid-19-data>)
- Oliveira-Duarte L, Aparecida Reis D, Fleury AL, (2021). Innovation Ecosystem framework directed to Sustainable Development Goal #17 partnerships implementation. *Sustainable Development* 29(5):1018–1036. (<https://doi.org/10.1002/sd.2191>)
- Pulliam JR, Epstein JH, Dushoff J et al. (2012). Agricultural intensification, priming for persistence and the emergence of Nipah virus: a lethal bat-borne zoonosis. *J R Soc Interface*, 9(66):89–101. (<https://doi.org/10.1098/rsif.2011.0223>)
- Remes J, Linzer K, Singhal S et al. (2020). Prioritizing Health: A Prescription for Prosperity. McKinsey and Company Special Report. (<https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/prioritizing-health-a-prescription-for-prosperity>).
- Saag M (2022). Wonder of wonders, miracle of miracles: the unprecedented speed of COVID-19 science. *Physiol Rev*, 102(3):1569–1577. (doi: 10.1152/physrev.00010.2022. Epub 2022 Apr 21. PMID: 35446679; PMCID: PMC9169823)
- Sachs J (2015). *The Age of Sustainable Development*. Columbia University Press.
- Shaffer ER, Brenner JE, Houston TP (2005). International trade agreements: a threat to tobacco control policy. *Tob Control*, 14:ii19–ii25.

- Sharma R (2018). Health and economic growth: Evidence from dynamic panel data of 143 years. *PLoS One*, 13(10):e0204940. (<https://doi.org/10.1371/journal.pone.0204940>)
- Skrzypiek K (2020). Trade in pharmaceuticals and medical goods in 2019 and COVID-19 implications for 2020. (<https://ihsmarkit.com/research-analysis/trade-in-pharmaceuticals-and-medical-goods-in-2019-and-covid19.html>).
- Snowdon W, Thow AM (2013). Trade policy and obesity prevention: challenges and innovation in the Pacific Islands. *Obes Rev*, 14(Suppl 2):150–158. (doi: 10.1111/obr.12090. PMID: 24102909)
- Thow AM, Swinburn B, Colagiuri S et al. (2010). Trade and food policy: Case studies from three Pacific Island countries, *Food Policy*, 35(6):556–564. (<https://doi.org/10.1016/j.foodpol.2010.06.005>)
- UNCTAD (2022). World Investment Report 2022. (<https://unctad.org/publication/world-investment-report-2022>)
- United Nations (2018). Review of SDGs Implementation: SDG 17 – Strengthening the means of implementation and revitalize the global partnership for sustainable development. (<https://sustainabledevelopment.un.org/index.php?menu=2993&nr=4163&page=view&type=20000>)
- United Nations (2022). SDG 17: Targets and Indicators. (<https://sdgs.un.org/goals/goal17>)
- United Nations/DESA (2020). COVID and Sovereign Debt. Policy Briefs 72. (<https://www.un.org/development/desa/dpad/publication/un-desa-policy-brief-72-covid-19-and-sovereign-debt/>)
- Wallace Brown G, Tacheva B, Shahid M et al. (2022). Global health financing after COVID-19 and the new Pandemic Fund. Brookings Institute, 7 December. (<https://www.brookings.edu/blog/future-development/2022/12/07/global-health-financing-after-covid-19-and-the-new-pandemic-fund/>)
- Weber H, Weber M (2020). When means of implementation meet Ecological Modernization Theory: A critical frame for thinking about the Sustainable Development Goals initiative. *World Dev*, 136:105129. (<https://doi.org/10.1016/j.worlddev.2020.105129>)
- WHO (2021). WHO-convened Global Study of the Origins of SARS-CoV-2. (<https://www.who.int/health-topics/coronavirus/origins-of-the-virus>)
- WHO Commission on Social Determinants of Health (2008). Final Report. (http://apps.who.int/iris/bitstream/handle/10665/43943/9789241563703_eng.pdf;jsessionid=3A7FB69DBC6EE5C2D967C2DBD4CC95DF?sequence=1)
- Williams GA, Jacob G, Rakovac I et al. (2020). Health professional mobility in the WHO European Region and the WHO Global Code of Practice: data from the joint OECD/EUROSTAT/WHO-Europe questionnaire, *Eur J Public Health*, 30(Suppl 4):iv5–iv11. (<https://doi.org/10.1093/eurpub/ckaa124>)
- Wismar M, Maier CB, Glinos IA et al. (eds). (2011). *Health Professional Mobility and Health Systems: Evidence from 17 European Countries*.

- Copenhagen: World Health Organization/European Observatory on Health Systems and Policies.
- World Bank (2021a). Debt Sustainability Analysis. (<https://www.worldbank.org/en/programs/debt-toolkit/dsa>)
- World Bank (2021b). COVID-19: Debt Service Suspension Initiative. (<https://www.worldbank.org/en/topic/debt/brief/covid-19-debt-service-suspension-initiative>)
- World Bank (2022a). Neither by Land nor by Sea : The Rise of Electronic Remittances during COVID-19 (English). Policy Research working paper WPS 10057; COVID-19 (Coronavirus). Washington, DC: World Bank Group. (<http://documents.worldbank.org/curated/en/099434205232231209/IDU0b9463f130c07f040160bb26018c9daadd997>)
- World Bank (2022b). When the debt crises hit, don't simply blame the pandemic. World Bank Blogs, 28 June. (<https://blogs.worldbank.org/voices/when-debt-crises-hit-dont-simply-blame-pandemic>)
- Yamey G (2002). Have the latest reforms reversed WHO's decline? *BMJ* (Clinical research ed.), 325(7372):1107–1112. (<https://doi.org/10.1136/bmj.325.7372.1107>)