



Germany's role in global health at a critical juncture

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In 2017, we set out—along with a larger group of authors—to assess Germany's contribution and potential leadership role in global health. We considered the ambitions and manifold efforts of Chancellor Angela Merkel's administration to become a trusted leader in global health governance and a reliable supporter of multilateral institutions, especially WHO. Based on the recommendations of our 2017 paper, in this Review we determine whether the country has indeed lived up to its vision and ambitions expressed in the Global Health Strategy adopted by the cabinet in 2020. Also, we outline what challenges Germany is now facing in a more complex global health environment and geopolitical situation, where leadership in the field is being redefined following the impact of the COVID-19 pandemic and amid broader shifts in the international order.

Introduction

When we presented our analysis of Germany's role in global health in 2017¹ at an event in Berlin, Richard Horton, the Editor-in-Chief of *The Lancet*, asked only half-jokingly whether we could expect Germany to finally shrug off the habitus of the "reluctant leader" and "step up". Back then, the entire team of authors were hesitant to use the term leadership as a broad label. We decided to highlight areas where leadership could be observed, but refrained from using it in the title of our previous study.¹ 7 years later, after a devastating global pandemic, notable political changes in Germany, and amid a substantially changed global health landscape, we aim to analyse Germany's role in global health once more.

We continue to be reluctant to subject any analysis of Germany's role in global health to a narrow understanding of leadership. Instead, we acknowledge that global health is largely shaped by collaborative governance, where leading stakeholders acknowledge that unilateral agency is ineffective.2 Our approach has been guided by the notion of collaborative leadership—a concept used in recent EU governance literature-which recognises that there are always multiple (formal or informal) leaders and which focuses on the leaders' ability to jointly create a shared vision and joint strategy of all actors involved.3 Combined with an understanding of Germany's positioning within the EU,4 this allows us to obtain a more comprehensive perspective on leadership because it acknowledges the importance of generating ideas and proposals, acting as a message broker or mediator with regard to a shared purpose, and working towards the evolution of a common endeavour.

Therefore, we used these ideas as signposts in our analysis of Germany's chosen course of action within a changed global health landscape, tracing the nature of the country's role in this field along multiple dimensions before suggesting future directions for its global health policy both at home and abroad.

Germany has remained a steady and, in many regards, indispensable supporter of global health despite rising geopolitical tensions and multiple global crises (polycrisis⁵), including the deadliest pandemic in living memory. Our key conclusion following on from our 2017 proposals is that Germany did have an essential

leadership role in global health between 2017 and 2024, both politically and financially, demonstrating the capacity to respond to the new challenges arising with the COVID-19 pandemic as well as to threats to the multilateral order. Leadership in global health is becoming multipolar, with strong positions held by G20 countries, such as Brazil, India, and South Africa, and with regional entities, such as the African Union, now taking on a more influential role. How Germany, as a European middle power and EU member, will position itself within this new context is a key issue, as well as whether it has the political and financial capacity to navigate the vast array of governance venues that global health leadership now requires.

The bigger picture: Germany's actions and priorities amid a different global health landscape

Since 2017, the extent to which the global health landscape has shifted demands that Germany's actions and priorities at both the domestic and international levels be contextualised once more.

A different world for global health

The COVID-19 pandemic meant that global health was placed high on the agenda of major high-level political platforms, such as G7 and G20, as well as of the Bretton Woods Institutions, to the effect that these bodies have become drivers of global health policy. Creating a global health working group and convening a meeting of health ministers for the first time proved to be a visionary step by the German Government during its G20 presidency in 2017. Chancellor Angela Merkel's invitation to attend the G20 Summit in Hamburg in 2017 was extended to the WHO's Director-General, which sent a strong signal of support to the global health body and created an interface between heads of state and the Director-General, helping to put health high on the political agenda. At the time, many G20 countries would have preferred to drop global health as a topic of discussion. Nevertheless, the subsequent presidencies of Argentina and Japan continued to highlight the issue of global health in respective Leaders' Declarations. With the evident financial impact of the COVID-19 pandemic and in being able to build on earlier forms of engagement, the G20 established, as a breakthrough measure, a Joint Finance and Health Ministerial Taskforce in 2020.6 Subsequent G20 presidencies from middle-income countries with increasing economical and political strength, such as Indonesia and India, have kept global health high on the group's agenda, despite the fact that multiple crises have continued to compete over degree of priority in the attention economy.7 In 2024, Brazil again deemed global health an issue of the utmost urgency. Similarly, Germany's G7 presidency in 2022 underlined—already under a new government—that support for global health, with WHO at the core, continues to be a key goal for the country.

On May 29, 2020, the President of the USA at the time, Donald Trump, announced the withdrawal of the US Government's support for WHO, later confirmed as set to come into effect by July, 2021.8 In response to the threats made by the Trump administration, Germany stood by WHO politically and financially, rallying other countries to do the same on the occasion of the World Health Assembly in 2020.9 Germany became WHO's largest overall contributor in the 2020-21 biennium (USD 1.07 billion) and its third-largest contributor in the 2022-23 biennium (USD 723 million). In concert with the EU and its member states, Germany stepped up considerably. 10 When counting the contributions of the EU Commission and its member states together, the bloc represents the largest donor to WHO since 2020 (2020-21: USD 1.69 billion, 63% of WHO's overall funding; 2022-23: USD 1.51 billion, 48% thereof).1 Germany also strongly supported the Access to COVID-19 Tools Accelerator (ACT-A)—a global collaboration launched by WHO and partners to quickly develop, produce, and fairly distribute vaccines, tests, and forms of treatment. Germany contributed almost USD 4 billion to ACT-A. The total share from the EU's institutions and member states (USD 7.5 billion) represented more than 30% of the initiative's total funding, which was as much as the US contribution.11

Germany helped to facilitate, financially and politically, the unprecedented number of diplomatic initiatives on global health that emerged, either individually or as a part of Team Europe (a joint endeavour by EU member states). The list of achievements includes the initiation and push for negotiations on a Pandemic Agreement and the Internal Health Regulations revisions at WHO, G7, and G20 meetings on global health, support to newer entities, such as the Coalition for Epidemic Preparedness Innovations and the Pandemic Fund, as well as the United Nations high-level meetings on health in 2023 and 2024.

The COVID-19 pandemic highlighted the manifold power asymmetries and strong inequity characterising global health, with timely access to vaccines being the most apparent manifestation hereof.¹² Political tensions between high-income, middle-income, and low-income countries existed long before the onset of COVID-19,

especially on matters pertaining to intellectual property rights. However, during the COVID-19 pandemic, discord went beyond just that: the unilateral decision to close national borders (eg, in December, 2021, after South Africa released information on the omicron variant)^{13,14} or the export restrictions imposed on vaccines and other materials important for adequate pandemic responses revealed the current limits to international cooperation on matters of health. These experiences have shaped how lessons from the COVID-19 pandemic are interpreted, learnt, and in consequence implemented, and such experiences lead, for example, to many diametrically opposed negotiating positions regarding the Pandemic Agreement.¹⁵

Germany's role in addressing the COVID-19 pandemic was often closely linked to that of the EU: beyond Team Europe's involvement in ACT-A, Germany was also among the signatories to the initial call by the President of the European Council in March, 2021, for what was later negotiated as a Pandemic Agreement.16 Yet, the EU also resisted proposals for a vaccine-related TRIPS waiver (regarding certain patent obligations) at the World Trade Organization (WTO) for more than 2 years after the onset of the COVID-19 pandemic. The EU has, however, sought to address other aspects of existing inequities in global health, for instance via the Team Europe Initiative on Manufacturing and Access to Vaccines, Medicines and Health Technologies (also known as MAV+);17 Germany complements these efforts by providing sizeable financial and technical assistance. Private sector initiatives, such as the investment of Germany-based biotechnology company BioNTech in setting up manufacturing capacity in Rwanda, are encouraging in this regard. However, it is unclear whether Germany will be able to adopt a coherent policy helping to maintain its role as a trusted global health actor in the future. With regional exchange and cooperation set to be of ever greater importance in the coming years (eg, regarding EU-Africa cooperation on health matters), 18,19 the aim to follow a coherent policy might require even more efforts.

Global health amid an evolving domestic context

These global developments have intersected with key domestic changes, some of which stand out as particularly decisive for Germany's present role in global health

First, the country's so-called Global Health Strategy was adopted in 2020 under Merkel's government.²⁰ The national elections of the following year represented a major change in the country's political landscape, with a new government coming to power after 16 years of Merkel's chancellorship; it was formed for the first time by a tripartite coalition between the Social Democratic Party (Sozialdemokratische Partei Deutschlands [SPD]), the Green Party (Die Grünen), and the Liberal Party (Freie Demokratische Partei [FDP]). Olaf Scholz (SPD), who had been Vice Chancellor under Merkel, took over

For more on the budgets for 2022–23 see http://open.who.int/2022-23/contributors/contributor

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her position. This change in chancellor and government would be important for German global health policy given that the chancellery and Merkel herself had a key role in defining the country's role herein. Considering that the SPD and Die Grünen had long been leading advocates for global health policy, it came as a surprise that this domain featured only peripherally in the agreed coalition treaty.21,22 The chancellery under Olaf Scholz has so far not conveyed any strong messages of support for global health, even though Chancellor Scholz continues to be a patron of the World Health Summit and opened the 2022 event in person. The continued engagement of the German parliament (Bundestag) on matters of global health has thus become of key relevance, especially through the very active Subcommittee on Global Health existing under the Parliamentary Health Committee. Cases in point were the special session held by the Bundestag on the occasion of WHO's 75th anniversary in May, 2023,23 and a parliamentary discussion on the COVID-19 Pandemic Agreement in February, 2024.24 In both cases, a large majority of members of parliament across the political spectrum, except for the far-right Alternative for Germany (Alternative für Deutschland) party, reiterated their strong support for multilateralist solutions and WHO as the central body.25 We are not aware of a similar expression of backing for WHO

Second, Russia's war of aggression on Ukraine since early 2022 has had a profound effect on Germany's foreign policy priorities. This effect was encapsulated in the term Zeitenwende (epochal tectonic shift), which Chancellor Scholz introduced in a speech to the Bundestag in February of that year, before being repeated in subsequent publications and interviews.26 The term captures Germany's fundamental restructuring of its defence policy, reduced energy dependence on Russia, and faith in the rules-based international order.27 At present, there are no indications of a foreign policy shift away from supporting multilateral organisations or the cuts to development assistance seen in other countries.28 Nevertheless, the rapid turn towards such foreign and security policy concerns has resulted in a significant reduction of attention being paid to matters of global health, not least because the German Minister of Health clearly has chosen as his focus major domestic healthcare reforms. In view of the costs of modernising Germany's Armed Forces coupled with a fiscal rule that limits taking on new public debt (the so-called debt break) and a general push for budget cuts across all ministries after the fiscal expansion during and in the aftermath of the COVID-19 pandemic, genuine constraints on the country's ability to maintain its extensive financial contributions to global health in the years to come are very likely to happen.²²

Germany has proven a steadfast supporter of multilateral global health organisations, especially WHO, and stepped up its engagement at a time when other countries like the UK and the USA are retreating from this engagement.²⁹ Although the transition of power did not come with a major change in policy direction for global health, we still see diminished activity from the chancellery.

In depth: tracing Germany's expanding role in global health

Building the institutional base for increased engagement

Responsibilities for global health are dispersed across different government bodies, such as the Federal Ministry of Health (Bundesministerium für Gesundheit [BMG]), the Federal Ministry for Economic Cooperation and Development (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung [BMZ]), the Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung [BMBF]), and the Federal Foreign Office (Auswärtiges Amt [AA]). In 2017,¹ we argued that Germany cannot strengthen its position on global health without first establishing greater cooperation between ministries and between stakeholders as well as investing more in domestic cross-sectorial capacity. We can indeed see some encouraging developments here.

The development of the Global Health Strategy adopted in October, 2020, by the German Federal Government (following on from the 2013 strategy with exactly the same title³⁰) was accompanied by interministerial coordination, a participatory process with stakeholder groups from civil society, think tanks, the private sector, academia, and youth organisations.31 This process was complemented by a high-level International Advisory Board on Global Health appointed by the BMG.32 The process started in June, 2018, and was coordinated by the BMG. At that time, there was little interest from the BMZ. The 2020 Global Health Strategy established regular meetings between the ministries at the state secretary level to ensure improved cooperation, which was intensified during the acute phase of the country's COVID-19 pandemic response. However, when it comes to interministerial policy strategies, there have been few signs that this coordination has thus far led to any common approaches and policy initiatives. In September, 2023, the BMG and BMZ held a high-level joint conference on pandemic preparedness. However, we have not seen any indications of this leading to a shared strategic approach between the two ministries.33

A Subcommittee on Global Health was first convened in the Bundestag in 2018 and then re-established in 2022 within the newly elected parliament, now as a joint committee between health and development. The Subcommittee creates a permanent link between government representatives, the Bundestag-based work, and non-state actors, as well as regularly hosting representatives of international organisations and global health experts.²² One of the most innovative investments in cross-sectoral knowledge exchange is the establishment of the Global

Health Hub Germany in early 2019, explicitly designed as a multistakeholder forum helping to enable dialogue across sectors and disciplines, as well as science policy transfer. Berlin is home to the annual World Health Summit, which was co-organised with WHO for the first time in 2022. Germany's strong commitment to global health, its prominent role at the EU level, and its investment in supportive infrastructure have undoubtedly led to increasing international recognition of the country's global health activities and have made Berlin an attractive location for relevant actors, such as the Wellcome Trust and the Bill & Melinda Gates Foundation, both of whom have established offices there.

In comparison with other countries, Germany stands out as providing several unique platforms for cross-sectoral, interdisciplinary exchange on global health both within and beyond government. However, in the absence of publicly communicated common strategies to current challenges in global health and reviews of major initiatives, we believe that the declared whole-of-government approach, as stipulated in the 2020 Global Health Strategy, still needs substantial strengthening.

Providing substantial and reliable financial resources to global health initiatives

The past few years have been tumultuous when it comes to the financing of global health: even before the COVID-19 pandemic, achievement of the UN's Sustainable Development Goals (SDGs) had been hampered by a shortfall of investment in health. Political crises and violent conflicts saw the number of people in need of humanitarian assistance reach nearly 300 million globally in 2023. The COVID-19 pandemic revealed the mismatch between countries' expectations of WHO and the body's actual financial resources.

Germany has mobilised massive financial resources in recent years, representing a significant increase: development assistance for health almost tripled from about USD 1·5 billion in 2018 to USD 4·4 billion in 2022, making Germany the second-largest contributor (figure 1). In the wake of the refugee influx induced by the civil war in Syria, Germany's funds for humanitarian assistance would increase from around EUR 510 million in 2015 to EUR 3·14 billion by 2022 (figure 2).³⁹ Funding for research on neglected and emerging diseases has also increased and diversified over the past decade. According to G-Finder, German donors spent USD 2·3 billion on research and development projects in global health between 2013 and 2022 (figure 3).

Germany has also proven to be a reliable financial partner. The most prominent example is the country's support for WHO at a time when the body's most important contributor historically, the USA, had halted its commitments in 2020. 40,41 This outcome is not merely a feature of Germany's COVID-19 response. For WHO's Emergencies Programme, the reliable support of the European country has been even more important, and

not just since the COVID-19 pandemic. For example, since its establishment in 2015, Germany has financed 40% of the budget of WHO's Contingency Fund for Emergencies. In May, 2021, Germany committed USD 100 million over 5 years to establishing a WHO Hub for Pandemic and Epidemic Intelligence under the Emergencies Programme, based in Berlin. The country has also contributed USD 120 million to the newly established Pandemic Fund—making it the third-biggest donor after the EU and the USA.⁴² Germany is, meanwhile, the fourth-largest contributor to the Global Fund to fight AIDS, Tuberculosis and Malaria (The Global Fund) and has increased its commitment to The Global Fund by 30% for the period 2023–25.⁴³

Germany's funding of global health activities is today more broadly distributed across ministries, but the power imbalances between them based on available funding remain considerable. An important accomplishment of the BMG since 2016 has been to allocate a more substantial budget of its own for global health endeavours, allowing for the much stronger support of WHO seen before 2020 and even more so during the

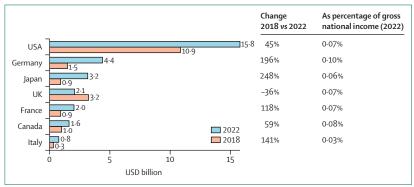


Figure 1: Official development assistance for health in the G7 countries

Data were sourced from OECD CRS databases. ³⁶ Data include imputed multilateral contributions obtained from donortracker.org.

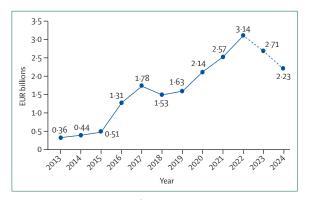


Figure 2: Humanitarian assistance from Germany, 2013–24 2013–21 data were sourced from the Federal Foreign Office³⁷ and 2022–24 data were sourced from the Federal Ministry of Finance (Bundeshaushalt Digital).³⁸ 2022 represents de facto figures; 2023 and 2024 represent planning figures. Please note that for humanitarian assistance, planning figures have tended to be lower than the de facto figures.

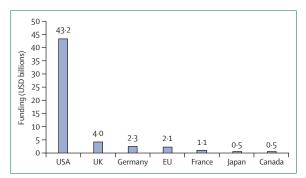


Figure 3: Funding of poverty-related and emerging diseases, 2013–22 (2022 constant prices)

Data were sourced from G-Finder.

COVID-19 pandemic." However, despite the extensive efforts Germany has made on sustainable funding for WHO and other multilateral entities, we fear it will be increasingly difficult to maintain these levels in the future.

Mobilising for global health and addressing related challenges

Germany has continued its strong support of multilateral health institutions. First, and most notable, is its strong commitment to WHO. Germany was the driving force behind the decision to increase the assessed contributions of respective countries to WHO, helping ensure the organisation's continued viability and independence in the long run.⁴⁵ Germany held the chair of the Programme, Budget and Administration Committee and guided the negotiations towards the eventual taking of a historic decision: namely, a gradual increase in assessed contributions starting with WHO's 2024–25 budget.^{46,47} Pursuing a WHO with sustainable and effective funding is also reflected in Germany's support for, and active contribution to, an investment round that aims to raise USD 7 billion for the global health body.⁴⁸

Second, for over a decade and throughout the COVID-19 pandemic Germany has advocated strongly for the EU's greater commitment to global health in general and to WHO in particular. Germany used its own EU Council presidency in the second half of 2020 to further the call for a new European Global Health Strategy. Ultimately, this consistent push over the course of subsequent EU Council presidencies led to the presentation of a new strategy by the European Commission in November, 2022,49 being followed by the Council Conclusions adopted in January, 2024, under Belgium's presidency.50 The COVID-19 pandemic resulted in closer collaboration between EU member states and the EU Commission on matters of global health, including the agreements reached through major legislative measures and the creation of new institutions, such as the Health Emergency Preparedness and Response Authority.51

Third, the German Government has sought to address long-standing challenges in the global health ecosystem:

namely, the fragmentation of the funding landscape and the overemphasis on disease-specific programmes. The funding was addressed by the 2018 Global Action Plan for Healthy Lives and Wellbeing (GAP), as first initiated by a letter signed by Merkel and the Heads of Government of Ghana and Norway.⁵² The GAP commits 13 multilateral agencies to more effective collaboration, with the aim to help the world's countries accelerate their progress on the health-related SDG targets. However, as an early evaluation from July, 2020, shows, major elements of this initiative were still not in place by that time (eg, a shared understanding on how it should operate, a theory of change, and resourcing).53 COVID-19 disrupted the global health landscape; as such, the GAP's scope and purpose might now have to be revisited. It is too soon to speak of success or failure, but preliminary analyses from joint projects with diverse countries and organisations suggest important lessons that can be learned in seeking to inefficiencies stemming the fragmentation.53 Currently, however, it seems unclear to us whether Germany provides sufficient leadership on this initiative. More determined cooperation between the respective ministries responsible for working with partner agencies will be needed, especially as these organisations expand their roles and increasingly come to shape policy.54

Germany has traditionally been a keen supporter of strengthening health-care systems and social protection systems. At the political level, this support resulted, among other things, in the extensive backing given to WHO's Universal Health Coverage Partnership and the multistakeholder partnership UHC2030. Whether the UHC2030 partnership will be successful in the long term remains to be seen. Of key importance is Germany's persistent engagement for a health system focus through its work in the governing bodies of the The Global Fund and Gavi, the Vaccine Alliance—to both of which the BMZ provides sizable funding. The Global Fund recently stated that 30% of its projected USD 13·1 billion portfolio in 2023–25 will be directed towards investment in health systems and pandemic preparedness.⁵⁵

These political initiatives are evidence of Germany's willingness and ability to lead (often and preferably in concert with other EU member states), as well as to put its political weight behind such endeavours. Many of the initiatives have originated from within the BMG. Development assistance for health is, however, the responsibility of the BMZ. BMZ is the focal ministry for ten of 13 multilateral agencies forming part of the GAP, for the Global Polio Eradication Initiative and for financial institutions, such as the World Bank and regional development banks. Technical knowledge at the BMZ ministry has been extensive in the past; however, before the COVID-19 pandemic global health had largely vanished from the BMZ's strategic priorities. COVID-19 (and a change in government and minister) has brought global health back into the ministry's political focus.

There are signs of a more strategic approach to global health now being revitalised in the BMZ. After a consultation process in 2022, the BMZ published a strategic document on the new core area (Kernthema) Health, Social Protection and Population Dynamics in July, 2023.56 The document brings together long-held positions related to global health: "health, pandemics and One Health", "social protection", and "population dynamics; sexual reproductive health and rights". 56 The document calls for an evaluation of the core area strategy by 2025 through the government agency, the German Institute for Development Evaluation (Deutsches Evaluierungsinstitut der Entwicklungszusammenarbeit). There is not yet a systematic review of the global health role and work of the BMZ and its technical cooperation group, the Deutsche Gesellschaft für Technische Zusammenarbeit (GIZ). Such a review could lay the basis for a coherent strategy in the future.

Overcoming the disconnect between ministries in terms of strategic approaches is a challenge, and one which will only become more prevalent. As in other policy fields, Germany's role in global health will in future most probably intersect more with policy positions and initiatives launched by or through the EU, which has defined the European Global Health Strategy as part of its geopolitical approach going forward. This is a major strategic difference to 2017. Increased member state alignment can already be seen in the Pandemic Agreement negotiations as well as in other political forums. The Global Gateway will be a key financial instrument, given its aim to raise EUR 300 billion in investments, including for health.⁵⁷

A lot will depend on how Germany and the EU reflect on experiences during the COVID-19 pandemic and address the growing geopolitical tensions and mistrust towards many high-income countries and the world's multilateral institutions. Expectations of leadership on global health have changed extensively; Germany, as such, must determine how best to build relationships of trust in a context of geopolitical instability, opposition to long-standing international institutions, and a diverse set of cooperation partners who, outside of the global health field, are systemic rivals or major economic competitors.

Trapped between domestic interests and normative goals—Germany's position on intellectual property rights and equity in global health

One of the most fundamental tests of global health governance emerging from the COVID-19 pandemic has been on access to vaccines. It is a sad reality that, despite noble promises and good intentions, only about 4% of people living in low-income countries and about 35% of people in lower-middle-income countries had received full vaccination by Dec 31, 2021. The reasons for this were various: wealthy countries (including Germany) had already secured priority access to vaccines for their own populations before COVAX was able to do so, trade

restrictions were imposed whether explicitly or implicitly (including by Germany), 59,60 and the sharing of doses through COVAX (ie, as a result of donations by those countries with surpluses) ended up being delayed. 61 In a world where vaccine manufacturing capacities are highly concentrated, the external dependency of some regions is acute. Lastly, in some contexts health infrastructures would experience challenges in rolling out large-scale immunisation campaigns requiring (depending on the vaccine) seamless cold chains.

There are numerous analyses seeking to draw lessons from these crisis experiences. 62,63 In this Review, we focus on Germany's chosen courses of action. Two questions are of particular relevance here. First, did Germany do everything it could to overcome inequity in vaccine distributions? Certainly, Germany's role in ACT-A and COVAX would be important, both regarding its political initiative together with Team Europe and via its sizable financial support. Germany also donated more than 120 million doses after the onset of the COVID-19 pandemic, making it the second-largest single country donor. 64,65 Germany also ramped up its development assistance to vaccination campaigns.66 Nevertheless, we argue that the German Government did not manage to live up to Merkel's statement at the 2021 ACT-A inauguration conference that it would be a "global public good to produce this [future] vaccine once we have it".67 Most prominently, the German Government supported the EU Commission's resistance to a fast and broad waiver to some provisions of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement. 68,69 Even though the involved countries found an agreement at the 12th Ministerial Conference of the WTO on a temporary waiver—one limited to COVID-19 vaccines—in June, 2022,70 the agreement came too late on in the health emergency to be of great importance.71,72

Prominent actors from civil society and academia have put forward counterarguments and provided noteworthy evidence that speak against the popular reasoningthat any weakening of intellectual property rights would undermine innovation is misleading and rather serves a given country's self-interest and commercial pursuits.73 With Germany's historically large health economy and heavily export-oriented pharmaceutical and medical technology industry, this seems a likely motivation, even though detailed academic studies on political influence are currently scarce. In 2022, Germany had an export surplus in health-related goods of USD 68 billion;74 whereas BioNTech's revenue in 2021 alone amounted to the equivalent of about 0.5% of the country's gross domestic product in that year.75 The FDP, one of the three coalition parties making up the current government, explicitly stated ahead of the 2021 elections that strict protection of intellectual property rights in the health space is important in supporting the competitiveness of the country's health economy.76 This domestic-oriented position is supported across successive German

administrations and is unlikely to go away any time soon, especially given an increasing economic competition between Germany and countries such as China which, under WTO ruling, still classifies as a developing country.

Second, has Germany contributed in a constructive way to mechanisms that would help to avoid such a global impasse in future? Officials from the previous and current government coalition argued that a waiver of intellectual property rights is unlikely to be a realistic solution to the problems of a shortage of production inputs, local production capacities in the countries with vaccine shortages, and the complexity of production processes (in the case of mRNA technology). 77,78 Although we find this to be a weak argument against an emergencydriven waiver, we believe that these other challenges need to be addressed, too. Different German ministries have launched initiatives aiming to contribute to a solution, particularly with regard to Africa. Together, the BMBF, BMG, and BMZ state that they have invested EUR 550 million in projects seeking to strengthen vaccine manufacturing in African countries.79 These efforts complement Team Europe's MAV+ endeavours. The BMG and BMZ also contribute financially to WHO's mRNA technology transfer hub in South Africa as well as to the strengthening of related regulatory agencies in multiple countries.80,81 A relevant form of private sector investment by the Germany-based BioNTech involves the creation of the first mRNA vaccine production facility on the African continent—the initial module was inaugurated in December, 2023. These are encouraging steps. Nevertheless, we believe that the German Government can and should do more. For example, despite the BMZ stating that local vaccine manufacturing represents a priority, 56,82,83 a unified and strategic approach across ministries has not been publicly communicated thus far. Furthermore, the German health economy, with its tremendous export and investment volume, has not been mobilised in a readily visible manner—the leadership of BioNTech's founders being a rare exception in this regard.

The debate over intellectual property, access, and benefit-sharing has now become symbolic of global health inequity. These topics have reappeared in different guises in the course of negotiations over a Pandemic Agreement. It also pressure tests the ability of EU member states to come forth with unified approaches, such as the proposal on a pathogen-access and benefit-sharing mechanism in December, 2023.

We see these debates as representative of a different world, one in which global health contributions as acts of charity are neither sufficient nor acceptable. St. St. We expect that a number of crucial global health discussions in the coming years (eg, on planetary health) will require significant negotiation at both the domestic and European levels with ministries and actors not usually active on matters of global health. The ability of German ministries taking the lead on global health to create

equity-enhancing policies and simultaneously navigate domestic and EU interests will, then, be vital.

The way ahead: four approaches to addressing future challenges

When we analysed Germany's role in global health in 2017, we concluded that the country had started to build a significant global health footprint both domestically and internationally. Our recommendations were grounded in assuming stability. In 2024, Germany's role has further matured partly through the high relevance the domain has gained as a result of the COVID-19 pandemic. With a view to its Global Health Strategy, Germany has stayed the course it had set: namely, to strengthen political engagement, multilateralism, and regional partnerships alike. Over the next few years, the nature of its contribution to greater global health equity will define Germany's standing for the foreseeable future. Four directions that will be important to defining Germany's role in global health at this point in time are worthy of being pointed out.

Address new realities in global health

In the current geopolitical environment, many of the negotiations taking place on global health will increasingly require the management of multiple different interests. Although the 2020 Global Health Strategy can still be a guiding document, too much has changed in the related landscape to assume that it will henceforth be sufficient in and of itself. After all, addressing new realities in global health is not a task which is (or can be) limited to health. We reiterate that major issues of global health are decided in other domains than the one of health, in which negotiations are led by the AA, the BMZ, or the Federal Ministry for Economic Affairs and Climate Action (Bundesministerium für Wirtschaft und Klimaschutz). Germany must find a better way to coordinate positions in relation to their impact on global health, and vice versa. There are numerous policies and initiatives that provide suitable entry points. The AA and the BMZ have issued feminist policies; Germany has a new security policy, too.90 The German Advisory Council on Global Change (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen) released, as noted, a report on "healthy living on a healthy planet".91 G7 and G20 thinktank activities have contributed to the global health debate as well.92 However, no strong initiatives to drive, bring together, and structure such discussions have emerged to date. The Global Health Hub Germany, universities, and think tanks should have a stronger role here. The review of the Global Health Strategy—planned for 2025—would be an opportune moment.

Equity and access will continue to be at the centre of global health. We therefore propose that a new International Advisory Board should be established in 2024, with strong voices from low-income and middle-income countries to advise the present German Government on its approach. Its work should be supported

Panel: Generating new knowledge and expertise on global health

This Review focuses predominantly on government-led policy initiatives from Germany. However, developing new concepts and ideas with regard to global health is a major element of leadership, too. We see a major weak spot in Germany's approach to the field: namely, the very limited breadth and depth of policy research and advice coming from think tanks and research institutes. Although some government-funded think tanks, such as Stiftung Wissenschaft und Politik and the German Institute of Development and Sustainability, have at least small project teams dedicated to global health, 94,95 many other institutes appear to work only sporadically on related issues. This scarcity regarding producing and evaluating relevant ideas in a dynamic policy space comes at the risk of being outpaced by other initiatives that might not be in Germany's wider interest. Moreover, work by other actors domestically that touches on global health often remains insufficiently picked up on by the international community. One such example is the endeavours of the German Advisory Council on Global Change (Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen), which recently produced a flagship report on "healthy living on a healthy planet".91

In 2017, we recommended that Germany's expanding leadership on global health must be accompanied by the greater international visibility of German research institutions working hereon and by a strengthening of related expertise and

training within the country, including bridging disciplines of non-biomedical nature or combining biomedical knowledge and policy-making know-how. Indeed, there have been encouraging signs regarding a somewhat modest academic field emerging. When it comes to connecting scholars in the domain of global health, the Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung) has invested in the creation of research networks to leverage synergy and cooperation between those working in biomedical and non-medical disciplines, most notably via the German Alliance for Global Health Research, which was launched in February, 2020.96 The Federal Ministry of Health (Bundesministerium für Gesundheit), meanwhile, has supported the Robert Koch Institute's creation of the Information Center for International Health Protection, which has grown substantially over the past few years. Lastly, Charité Universitätsmedizin, the largest university hospital in Germany, established a Center for Global Health in 2023. The strengthening of related scholarship beyond the two longstanding, excellent global health research institutions in Heidelberg and Munich has progressed less quickly than hoped, particularly in the area of social sciences. Unfortunately, as a number of recent studies support, the COVID-19 pandemic did not result in a tangible boosting of distinct lectureships and professorships on global health or in the strengthening of global health in medical and non-medical tertiary education. 97,98

by the kind of analytical papers we have found lacking for this Review. Such a board will lead to stronger reflection on the lessons learnt from the COVID-19 vaccine inequity and a reformulation of Germany's priorities regarding intellectual property rights, supply chains, debt relief, and the country's role in financial institutions, the voice of developing countries in global health bodies, global health in the recently published security strategy, as well as coherence with the European Global Health Strategy. We believe that such an advisory board should be established by the chancellery because of the broad political implications involved and the contributions from so many different ministries. This body should report its findings not only to the government (eg, cabinet or meeting of state secretaries) but also to the Bundestag.

Continue to be a reliable partner for global health institutions and on multilateral solutions

Germany has had a substantial role in strengthening multilateral global health institutions through expanded and reliable funding as well as continued political support, particularly in regard to WHO. Although we do not think that Germany will step back from its commitments in general, we observe that the new government has not given high priority to global health thus far, neither in its programmatic coalition agreement nor through signals emanating from the chancellery. The

recently announced budget cuts of ministries central to global health and the reduction of funds to WHO add to this impression. We propose that the different German ministries should continue to lend their political and financial influence to global health initiatives, but in a much more coordinated manner. Germany is an essential voice of multilateralism. The country must continue to give its strong backing to WHO while also encouraging its reform. With the ongoing war in Ukraine, the role of the WHO office for the European region also gains new importance—in the current emergency, and especially when the rebuilding of the country's health-care system by necessity eventually begins.

Following its major achievements regarding WHO, Germany must now prioritise reflection on the governance and financing of other global health organisations, using its role as a major funder to affect change. Such a reflection process would need to be complemented by an analysis of its own role in ensuring support for global health among the world's major financial institutions and development banks. Politically, the GAP needs revitalisation and substantial political support to sustain the efforts of multilateral agencies. Furthermore, the chancellery should initiate an Expert Committee to work with the respective ministries on developing proposals for the sustainable financing of the global health system to be

taken to key political bodies, such as the Health and Finance Ministers Meeting of G20. Germany has very recently rightly supported the call to include the African Union as a member of G20, which will mean the addition of key voices to global health activities and working groups, and greater potential for AU–EU cooperation.

Strengthen the domestic base of expertise

Germany has also invested in global health domestically, for example through the special programme of the BMG funding domestic activities towards better coordination and multistakeholder cooperation. However, in writing this Review we are not aware of a thorough analysis of the size and scope of domestic investment in global health.93 These preliminary positive indications need to be further strengthened going forwards. First, academic work on global health in Germany needs more investment (panel). We propose to increase the number of university professorships and global health centres operating from a transdisciplinary perspective, with a specific focus on international policy and governance processes. Continued support for research networks (such as the German Alliance for Global Health Research) is certainly needed, and the funding of projects with BMZ partner countries should also be expanded. There is an extraordinary mixture of projects and centres of expertise at present, many of which go unnoticed and thus do not receive the attention they deserve. For example, the BMG runs a Global Health Protection Programme with notable expertise; the BMZ actively contributes to the vast number of financing debates in various forums. Germany also has an excellent group of federal government authorities, such as the Robert Koch Institute (RKI), Bernhard Nocht Institute for Tropical Medicine, and the Paul Ehrlich Institute, which are associated with strong expertise and global links. It seems to us that in Germany other ministries and actors involved in global health do not sufficiently avail themselves of this expertise. In the worst case scenario, the money does not go to where such specialist knowledge is located. The next iteration of the country's Global Health Strategy will need to address this issue.

Second, we propose renewing efforts to integrate global health into medical education and public health curricula. Also, we suggest offering more interdisciplinary options for studying global health, including at International Relations schools. Third, the translation of research into actionable policy recommendations needs to be made possible through more diverse and extensive work by think tanks and research institutes. This work cannot (and should not) be limited to government-funded programmes. Germany-based foundations and philanthropic organisations need to become involved, ensuring that the richness of the debate in civil society is translated into pertinent policy proposals, so that Germany can contribute to new thinking on global health. The Mercator Foundation's support for the Centre for Planetary Health Policy in Berlin is an encouraging example in this regard. Other key foundations in Germany should follow.

Fourth, the global appeal of Germany as a place for global health expertise, partnership, and exchange should be consciously improved. This improvement should include the continued strengthening of the work of major public health institutions (eg, the RKI) internationally, Germany being a key site for global health policy (eg, through conferences and platforms such as the World Health Summit) and the establishment of offices by major players in global health (eg, the WHO Hub for Pandemic and Epidemic Intelligence in Berlin). With regard to strengthening of coordination and expertise in global health, more systematic exchange could be of great benefit. This change must include new relevant actors—for example, those involved in digital health and artificial intelligence.

Expand accountability and coordination mechanisms for German global health activities

With an expanding global health portfolio and the variety of related activities seeing involvement from Germany, the need for mechanisms to hold German governmental officials to account for their chosen courses of action has only increased. A natural starting point for accountability is the evaluation of the German Government's Global Health Strategy announced for 2025. We strongly recommend that the respective ministries should agree on a set of measurable indicators and qualitative assessments, which are reported both annually and publicly. Although it is desirable to have one Global Health Strategy across government bodies, without detailed analysis it is difficult to assess what individual ministries have contributed in this regard. In the absence of a unified Achievement Report, the Parliamentary Subcommittee on Global Health will have a difficult time in holding the German Government to account on its promises. Furthermore, such reports should not only be discussed within the Subcommittee itself but also the Bundestag. Recently, the co-chair of the Subcommittee proposed in a position paper of his party (FDP) an enquête commission to evaluate the national actions during the COVID-19 response.99 This proposal would be an important step to draw lessons learnt and we suggest to expand it beyond the mere national perspective and also include Germany's global health work as part of the commission's work.

We advocate for a more politically oriented analysis, which also gives guidance on where to invest political capital and financial support in future. The role of civil society will be critical in this process but it, too, must now move away from a focus on input (the amount of money made available for global health) towards instead assessing key political and strategic priorities as well as outcomes.

Conclusion

Germany's role in global health has further expanded. It has lived up to many of its earlier promises and claims:

it has upheld multilateral solutions to global health challenges, increased its financial contributions significantly, and successfully advocated with others for the EU's stronger engagement on global health. At the same time, Germany remains politically one of the strongest defenders of the present intellectual property rights system. Some of the domestic structural weaknesses have not yet been resolved even though progress has been made: policy coherence across responsible ministries has continued to prove elusive, particularly on topics requiring strong cross-sectoral collaboration (eg, climate and health). Furthermore, although the institutional base for global health has expanded, the domestic research and policy-advice landscapes are still not sufficiently developed to live up to providing genuine leadership across the increasing number of topics and forums dealing with global health challenges. The pledge of Germany—both the chancellery and the BMG-to the WHO investment round might signal a renewed political and financial commitment to global health, given the rather low key global health engagement of the current political leadership in Germany. However, given developments in European and German politics, including strong financial pressures, it might be difficult to uphold this stamina in the future. The biggest issue at hand is a strategic one confronted by all high-income countries in the face of global power shifts: how will Germany find its place within a very challenging geopolitical environment for global health?

Contributors

All authors contributed equally to conceptualisation, analysis, paper drafting, reviewing, and editing of the text. CF contributed to data curation and data analysis.

Declaration of interests

CF declares involvement in the initiation and build-up of the WHO Hub for Pandemic and Epidemic Intelligence in Berlin since 2021. He also consults GIZ on Female Genital Schistosomiasis and on pandemic preparedness and response. IK declares assistance with the conceptualisation of the WHO Hub in Berlin. AH declares no competing interests.

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