RESEARCH ARTICLE

International organisations as 'custodians' of the sustainable development goals? Fragmentation and coordination in sustainability governance

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Abstract

It is widely assumed that the fragmentation of global governance can affect coordination efforts among international institutions and organisations. Yet, the precise relationship between the fragmentation of global governance and the extent to which international organisations coordinate their activities remains underexplored. In this article, we offer new empirical evidence derived from the so-called custodianship arrangements in which numerous international organisations have been mandated to coordinate data collection and reporting for 231 indicators of the 17 Sustainable Development Goals (SDGs). These complex custodianship arrangements provide a fertile testing ground for theories on the relationship between fragmentation and coordination because the institutional arrangements for each of the 17 SDGs have emerged bottom–up with varying degrees of fragmentation. Through a comparative approach covering 44 custodian agencies and focusing on the most and least fragmented custodianship arrangements, we make three key contributions. First, we offer a novel operationalisation of institutional fragmentation and coordination. Second, we present empirical evidence in support of the claim that fragmentation negatively affects coordination. Third, we provide nuances to this claim by identifying factors that affect the strength of this relationship. Based on our analysis, we suggest further steps that might facilitate coordination in global sustainability governance.

1 | INTRODUCTION

In global governance scholarship, a long-standing debate surrounds the impact of governance architectures on governance outcomes (Barnett et al., 2007; Keohane & Victor, 2011; De Coninck & Bäckstrand, 2011; Young, 2012; Kanie, 2015; Dauvergne, 2018; F. Biermann & Kim, 2020). A key question is the extent to which institutional fragmentation affects the ability of actors to coordinate their activities and realise synergistic governance outcomes (Zürn & Faude, 2013). The earlier

literature suggests that institutional fragmentation might form a barrier to coordination (F. Biermann et al., 2009; F. Biermann et al., 2020). So far, however, few studies have operationalised these concepts in a way that allows for systematic empirical analysis of their relationships.

Highly global fragmented governance architectures are described as patchworks of international organisations with non-hierarchical, overlapping dispersal of rule-making capacity (Zelli & Asselt, 2013). For the purposes of this study, coordination is then defined as mutual adjustment of behaviour (Biermann & Koops, 2017,

20). We aim here to add to the debate on the relationship between these two concepts by providing a novel operationalisation of both. We introduce a new operationalisation of fragmentation based on the dimensions of *multiplicity* and *dominance*, which results in a gradient rather than a binary measure of fragmentation. To assess coordination, we differentiate between three dimensions that indicate more or less far-reaching coordination.

We apply these concepts to the novel system of 'indicator custodianship' for the 17 Sustainable Development Goals (SDGs), which have been agreed by the United Nations (UN) in 2015 as part of the 2030 Agenda for Sustainable Development (Biermann et al., 2017; Vijge et al., 2020). The SDGs cover nearly all areas of global governance and so present the daunting challenge of coordinating the collection, processing, and reporting of data (Kanie, 2020). To measure any progress towards achievement of the SDGs, 231 indicators have been agreed, and the UN mandated (as of April 2020) 44 international organisations and programmes to serve as 'custodians' for these indicators. These indicator custodians are expected to develop new methodologies, collect data, allow data aggregation and harmonisation, improve national statistical capacity, and provide data for annual SDG reports (United Nations Statistical Commission, 2017). Coordination among these custodian agencies is key to ensuring a functioning system of data collection with consistent methodology, streamlined data requests, and efforts at capacity building.

The division of indicators is based largely on the mandates of international organisations, their statistical capacity, and their willingness to accept a custodianship mandate. As we demonstrate later in this article, this division across the SDGs has resulted in 17 custodianship arrangements that vary greatly in their degree of fragmentation. So, the main question becomes: how does the variant degree of fragmentation influence the type and degree of coordination between custodian agencies?

Our results demonstrate that institutional arrangements matter for policy outcomes. With SDG indicator custodianship, the division of labour was established without much consideration of how it might affect coordination. Our categorisation of the arrangements for all 17 SDGs, combined with the insights from our case studies, indicates policy areas that are most likely to face coordination challenges. By identifying variables negatively affecting coordination, we provide additional entry points to facilitate coordination.

We have structured the article as follows. The next section sets out our research design, operationalisation, and method. We then qualitatively assess the degree of coordination among custodian agencies for our two case studies, followed by a discussion of our theoretical contributions and policy recommendations, and a conclusion.

Policy Implications

- The ad hoc assignment of Sustainable Development Goal (SDG) indicator custodianship has resulted in 17 separate institutional arrangements of varying degrees of fragmentation. We find that the more fragmented an arrangement is, the greater the coordination challenges its custodian agencies face. Policy interventions are needed to deal with this emerging system of custodians.

- As a policy response to ease this coordination challenge, we recommend encouraging system-wide knowledge sharing on potential approaches to coordination. A database of ongoing coordination efforts could for example help less resourceful agencies to join or establish initiatives based on lessons learned from other SDG issue areas.

- To reduce fragmentation, we recommend designating an orchestrator with a clear mandate to steer the custodian agencies. Potential candidates include the Inter-Agency Expert Group on the SDGs, ECOSOC, the UN Statistical Commission, a UN Chief Statistician, and the High-level Political Forum on Sustainable Development.

- For SDG 10 on reducing inequality, the highly fragmented custodianship arrangement has not been conducive to coordination initiatives. Reducing fragmentation through, for example, assigning a leading agency with a clear coordination mandate would help streamline the operations of the custodians.

2 | FRAGMENTATION AND COORDINATION

We define institutional fragmentation as the degree to which a governance architecture is characterised by patchworks of international organisations with non-hierarchical, overlapping dispersal of rule-making capacity (Zelli & Asselt, 2013). High degrees of such fragmentation have been reported, for example, for global governance domains such as finance, security (Held & Young, 2013), health (Holzscheiter, 2017), and environment and climate (Gupta et al., 2016; Karlsson-Vinkhuyzen & McGee, 2013). Less fragmented governance architectures are more centralised or more hierarchically organised with fewer organisations, typically organised around an actor with strong influence (Kim et al., 2020).

Over the past decade, several scholars have studied the impact of fragmentation on the outcomes

of governance (Barnett et al., 2007; F. Biermann & Kim, 2020; Dauvergne, 2018; De Coninck & Bäckstrand, 2011; Kanie, 2015; Keohane & Victor, 2011; Young, 2012). One dependent variable in this research has been the degree of coordination between agencies, that is, the mutual adjustment of behaviour (Biermann & Koops, 2017, 20).

Evidence suggests that a high degree of governance fragmentation often limits effective coordination among international actors (for an overview see F. Biermann et al., 2020), with numerous undesirable outcomes, from a lack of an overall vision (Barnett et al., 2007) to duplications and inconsistencies (Kanie, 2015), scattering of responsibilities, splintered efforts and limited information sharing (Holzscheiter et al., 2012), limitations in attracting funding (Keohane & Victor, 2011), limited pooling of resources (Nasiritousi et al., 2020), difficulties in assigning accountability (Ivanova & Roy, 2007), and limited governance capacity (Held & Young, 2013). The absence of a dominant actor with a managing role has been argued to result in 'counter-productive politicization of coordination efforts' among agencies competing for leadership (Holzscheiter et al., 2012, p. 71). This has been observed especially in global environmental governance, an area with an exceptionally high degree of institutional fragmentation (Mitchell et al., 2020). In response, a long-standing policy debate has discussed the advantages and disadvantages of institutional streamlining through a world environment organisation or similar agency (Biermann & Bauer, 2005, Kim et al., 2020; Vijge, 2013).

In the end, how institutional fragmentation and coordination relate to each other also depends on the types of linkages between actors (Keohane & Victor, 2011) and their interactions (Oberthür & Gehring, 2006). The desirable governance outcomes that some also attach to fragmentation (Acharya, 2016; Keohane & Victor, 2011; Nasiritousi et al., 2020) are often conditional on such links. There are examples of international organisations that have mutually adjusted their policies without direct interaction (Oberthür & Gehring, 2006). However, insights from the substantive focus of our analysis—that is, the realm of global monitoring and evaluation—suggest that, without any interactions, international organisations are likely to use different understandings of concepts, duplicate efforts, and make excessive data requests at the country level (Holzscheiter et al., 2012). Therefore, we *expect an inverse relationship between institutional fragmentation and the degree of coordination*, that is, we expect that the higher the degree of fragmentation, the lower the degree of coordination.

Existing typologies of fragmentation and coordination, however, lack nuance when one seeks to assess the impact of different degrees of fragmentation on international coordination. For example, some typologies include structures of coordination, differentiated between authoritative, networked, or decentralised (Zürn & Faude, 2013); the nature of interactions including synergistic, cooperative, and conflictive coordination (F. Biermann et al., 2009); types of activities that might be coordinated including analytical, normative, or operational (Ivanova & Roy, 2007); potential outcomes of coordination including alignment and harmonisation; or the level—global, regional, national—at which coordination occurs (Holzscheiter, 2012). Most studies use coordination almost as an afterthought, offering some examples of potential areas for coordination yet without offering a typology that allows for comparison.

This is what this article seeks to contribute as well, using the empirical case of the 17 custodianship arrangements for the more than 200 SDG indicators. Therefore, we now offer our own, more nuanced operationalisation of fragmentation and coordination.

2.1 | Operationalising fragmentation

To measure the degree of fragmentation of the 'indicator custodian' arrangements for the SDGs, we operationalise fragmentation along two dimensions: *multiplicity* and *dominance*. These dimensions allow us to focus on two major theoretical questions, namely to what extent coordination becomes less likely when more actors are involved, and to what extent a structurally prominent actor fosters coordination. Based on this operationalisation, we mapped the degree of fragmentation of the 17 SDG issue areas, using the indicator data by the UN Statistics Division.

Multiplicity reveals the dispersion of indicators over custodian agencies and captures the diversity of actors in the arrangement. To consider variant numbers of indicators across SDGs, we divide the number of custodians by the number of indicators, leading to a score between zero and one (United Nations Statistics Division, 2020a, 2020b; including a few indicators without custodians). This is shown on the horizontal axis of Figure 1. For example, SDG 7 (on affordable and clean energy) has six custodian agencies for six indicators, resulting in the highest score on the multiplicity metric. The other extreme is SDG 3 (on good health and well-being), where six agencies serve as custodians for 27 indicators.

Dominance indicates the extent to which an institutional arrangement is marked by a major actor. We determined dominance by counting for each SDG the largest number of indicators held by a single agency and dividing this by the total number of indicators, again with a score between zero and one. This is shown on the vertical axis of Figure 1. For example, the UN Environment Programme is a custodian for 11 out of the 13 indicators for SDG 12 (on responsible consumption and production), resulting in the highest score on the dominance metric. The other extreme is SDG 1 on
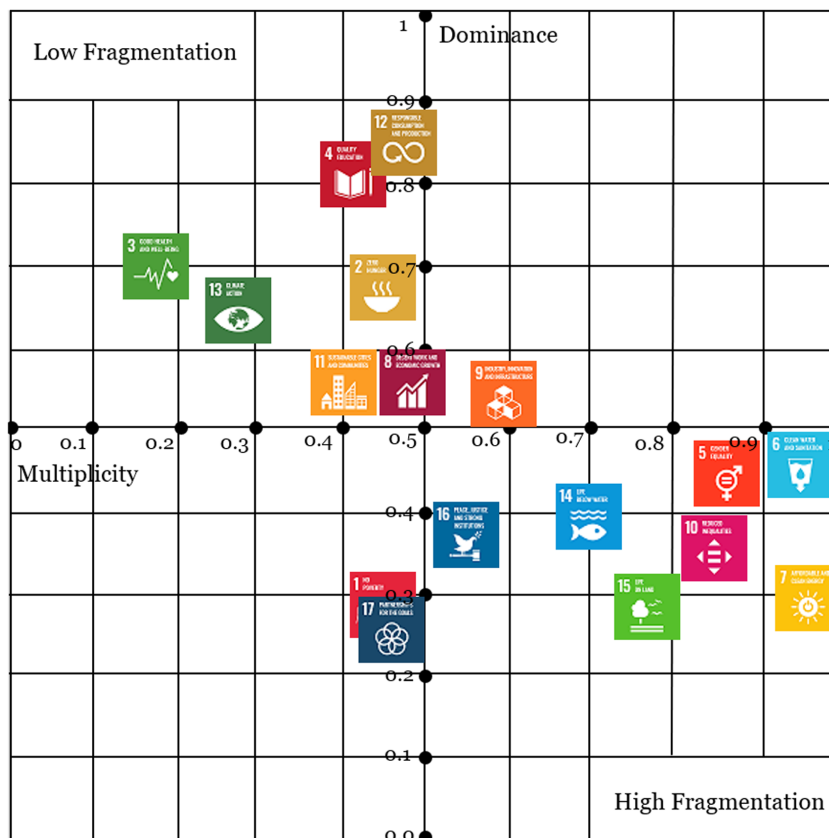
FIGURE 1   Indicator custodianships plotted by multiplicity (*x*-axis) and dominance (*y*-axis). Derived from UN Statistics Division, April 2020

poverty eradication, where the most dominant agency, the UN Office for Disaster Risk Reduction, serves as custodian for only four of 14 indicators.

Based on these dimensions, we categorised the degree of fragmentation of SDG indicator custodianship arrangements in Figure 1. A continuum becomes visible after plotting the arrangements. The SDGs in the top left quadrant in Figure 1 have both one dominant custodian along with only a few other custodians; we characterised this as low fragmentation. The SDGs in the bottom right quadrant, conversely, have no dominant custodian and high multiplicity. We categorised this as high fragmentation.

Placing the SDGs in other quadrants would be theoretically possible but is apparently not the case in practice. For example, an egalitarian situation where nine indicators are divided among three custodians, with three indicators being the most any custodian has, would place an SDG near the middle of the lower left quadrant. Yet, such an arrangement does not exist. The other extreme, the upper right quadrant, would occur when many custodian agencies are co-custodian of individual indicators, with one agency being involved with most indicators. Again, empirically such an arrangement does not exist.

Based on this mapping of fragmentation, we studied in detail the degree of coordination among agencies—the dependent variable in this research—under different conditions of institutional fragmentation. We focused on two SDG custodianship arrangements that had especially high or low degrees of fragmentation, that is, SDG 3 on health with a low degree of fragmentation, and SDG 10 on reduced inequalities with a high degree of fragmentation. Despite different institutional arrangements, these SDGs share underlying policy areas captured under the banner of 'well-being' (Waage et al., 2015). In addition, compared with other highly fragmented arrangements with fewer indicators (for example SDG 7), SDG 10 is characterised by a large absolute number of custodian agencies. This makes it an interesting case to study.

2.2 | Operationalising coordination

We operationalised coordination, the dependent variable in this research, along three qualitative dimensions: interorganisational knowledge sharing, joint problem solving and conflict resolution, and external knowledge sharing and advocacy. The dimensions are progressive and require increasing commitment and adjustment from the actors involved: devising a joint strategy for problem solving and conflict resolution needs more behavioural adjustment than mere interorganisational knowledge sharing. We developed these three

dimensions of coordination based on literature reviews and exploratory interviews with representatives from 16 custodian agencies that have a role in a wide range of SDGs. Our operationalisation focusses on coordination outputs as opposed to outcomes or impact (Oberthür & Gehring, 2006; Stokke, 2001), given that it is too early in the SDG trajectory to draw conclusions about the extent to which any interactions have delivered on their promises, including more efficient and effective data management (outcome) in a way that contributes to the attainment of global sustainability (affect).

1. *Interorganisational knowledge sharing* is a light form of coordination, mainly through the formation of cognitive networks that can establish trust and inspire further integration with higher levels of commitment and uniformity (R. Biermann, 2008; Jordan et al., 2018). Knowledge sharing can be observed for instance in joint interagency platforms. An example is the Technical Cooperation Group on the Indicators for SDG 4, called Education 2030, that involves the UN Educational, Scientific and Cultural Organization, UNICEF, the OECD, and the World Bank Group (UNESCO Institute of Statistics, 2021).
2. *Joint problem solving and conflict resolution* is the second dimension of coordination that we study. It includes joint knowledge production, monitoring systems, strategies, and guidelines. In a well-coordinated setting, actors agree on a problem definition and joint framework for action. This requires shared sensemaking, or 'normative integration', and the buy-in to commit to this shared problem definition (Ivanova & Roy, 2007, p. 11). Regarding custodians, we analyse here for example the resolution of inconsistencies, overlap, and inefficiencies related to data collection and capacity building. The Integrated Reporting Initiative for SDG 6 on Water, for instance, looks for synergies across UN agencies and aims to harmonise methodologies and requests for data (UN Water, 2021).
3. *External knowledge sharing and advocacy* is the third dimension. Here, we look at efforts of international organisations to communicate knowledge to a wider public through knowledge hubs or broad engagement with third parties. For example, the Integrated Monitoring Initiative for SDG 6, mentioned above, seeks to integrate external reporting. In the context of the SDGs, the organisation of expert meetings and side events during the High-level Political Forum on Sustainable Development is a novel platform for (external) knowledge sharing and advocacy (see Beisheim, 2018).

2.3 | Data collection and analysis

We conducted a qualitative analysis of the degree of coordination among indicator custodians for SDG 3 (health) and SDG 10 (reduced inequalities). For this purpose, we combined desk research with semi-structured expert interviews. For desk research we relied on the UN Statistics Division's meta-data repository, reports by the UN Statistical Commission, the Inter-Agency Expert Group on the SDGs, reports of the custodian agencies, and the High-level Group for Partnership, Coordination and Capacity-Building for Statistics for the 2030 Agenda for Sustainable Development. This resulted in an initial compilation of initiatives.

We conducted 12 semi-structured interviews to complement our findings. For SDG 3, actors affiliated with five out of six custodian agencies, and for SDG 10 actors affiliated with seven out of nine custodian agencies agreed to partake in the study.[1] Interviews are a suitable method because knowledge of these initiatives is concentrated among individual civil servants who act as indicator focal points. Within their organisation, they have the specialised knowledge to participate in these initiatives. These civil servants are publicly listed for each indicator, which allowed us to approach those for the indicators of SDG 3 and SDG 10 specifically (United Nations Statistics Division, 2022). Most organisations had one focal point for a particular SDG, who was sometimes responsible for multiple indicators. For organisations with more than one focal point for a particular SDG, we approached the most senior person, who is often responsible for several indicators for an SDG and oversees activities for indicators for which this person is not the focal point. These interviews helped us to analyse the degree and types of coordination in practice and to discern motives for (non-)involvement of agencies in coordination efforts.

Based on this evidence, we qualitatively evaluated the degree of coordination for each SDG. First, we considered which dimensions of coordination are covered by initiatives organised around SDG 3 and 10. Second, we considered how many custodian agencies initiatives mobilise to adjust their behaviour. Lastly, we considered potential contradictions between paper and practice, by using our interview data to determine to what extent initiatives are realising the dimensions of coordination at which they are aimed. These criteria allow us to compare arrangements. However, as our dimensions of coordination are mostly qualitative, our overall assessment of the degree of coordination required some level of interpretation.

3 | RESULTS

Comparing the institutional arrangements for SDG 3 (health) and SDG 10 (reduced inequalities), we find substantial differences in their degrees of fragmentation. The arrangement of SDG 3 scores low on multiplicity and high on dominance, with only six custodians for 27 indicators and the World Health Organization (WHO)

as a custodian for 20 of these indicators. The arrangement of SDG 10, in contrast, is highly fragmented. Here, 11 indicators are managed by nine custodians, and no agency is structurally dominant. The indicator division is shown in Table 1 (United Nations Statistics Division, 2020a, 2020b; see also Figure 1 above).

We also find significant differences between coordination for these two SDGs (see Table 2 below): for SDG 3, most emerging initiatives are strongly steered by the WHO, and they cover all three dimensions of coordination. For SDG 10, however, coordination is limited mostly to informal and ad hoc forms of interorganisational knowledge sharing. Coordination in other dimensions is largely absent. We now present these findings in more detail for each of these two SDGs.

3.1 | Coordination related to SDG 3

3.1.1 | All dimensions of coordination are covered by emerging initiatives

We observed the emergence of multiple coordination initiatives for interorganisational knowledge sharing and practical problem solving and conflict resolution around country-level data collection for single indicators under SDG 3. These initiatives focus on the primary functions associated with indicator custodianship. These primary functions include developing a methodology for a specific indicator, stimulating national statistical capacity building to increase the collection of these data, collecting the data, and summarising the data for annual SDG reports. Most of these efforts are informal and ad hoc and focus on the creation of the yearly SDG report.

Two formalised interagency initiatives related to individual indicators on SDG 3 have emerged as well: the UN Maternal Mortality Inter-Agency Group (for indicator 3.1.1.) and the Inter-Agency Group on Child Mortality Estimation (for indicator 3.2.1.). In addition to the functions mentioned for the more informal coordination efforts for single indicators, these groups also engage in some form of external knowledge sharing, with each group presenting a database with key benchmarks.

Additionally, two initiatives, which we elaborate on below, have emerged to coordinate the health data sphere, with a particular focus on joint problem solving and conflict resolution. We also note initiatives aimed at joined advocacy. Overall, these initiatives depend for their success on the strong and central role of the WHO.

3.1.2 | SDG-wide initiatives and joint advocacy are strongly steered by the WHO

The Health Data Collaborative has been the first major new initiative around SDG 3. This initiative now involves four of the six SDG 3 custodians (the WHO, UNAIDS, UNICEF and the OECD) along with other global health-related agencies (Health Data Collaborative, 2018a). The WHO stimulated the establishment of this collaborative in 2016, led the development of its operational working plan, and currently hosts the collaborative's secretariat (World Health Organization, 2015). After deliverables were identified collaboratively, between 2016 and early 2019, 12–15 working groups were operational at some point, most of which were co-led by the WHO (Craig R. Burgess, interview 13 August 2020; Mary Mahy, interview 11 August 2020; Health Data Collaborative, 2018b). Although the initiative was established for knowledge sharing, problem solving, and conflict resolution, under WHO leadership, the Health Data Collaborative functioned mostly as a mechanism for knowledge sharing (more on this below).

TABLE 1 Indicator custodians for SDG 3 and SDG 10. Derived from UN Statistics Division, April 2020

SDG 3: Good health and well-being		SDG 10: Reduced inequalities	
Custodians (6)	**No. of indicators (27)**	**Custodians (9)**	**No. of indicators (11)**
World Health Organization	20	World Bank	4
UN Children's Fund	4	International Labor Organization	2
Population Division of the UN Department of Economic and Social Affairs	2	Office of the High Commissioner for Human Rights	1
Joint UN Programme on HIV/AIDS	1	International Monetary Fund	1
Organisation for Economic Cooperation and Development	1	UN Department of Economic and Social Affairs Financing for Development Office	1
UN Organization on Drugs and Crime	1	Organisation for Economic Cooperation and Development	1
		International Trade Centre	1
		UN Department of Economic and Social Affairs Population Division	1
		International Organization for Migration	1

TABLE 2 Findings on each dimension of coordination for SDG 3 and SDG 10

	SDG 3	SDG 10
(Interorganisational) Knowledge sharing	Both informal as well as more institutionalised initiatives	Only informal, ad hoc initiatives
Problem solving and conflict resolution	Global Action Plan and Health Data Collaborative both aim to solve overarching inefficiencies and overlap in health data sphere	No ongoing initiatives
External knowledge sharing and joint advocacy	Global Action Plan working on SDG 3 data hub. Several examples of joint advocacy through side events, presentations of initiatives	Individual data platforms but no joint hub. Few to no joint efforts at joint advocacy

The second major initiative around SDG 3 is the 2019 Global Action Plan for Healthy Lives and Well-being for All. The Global Action Plan is a mechanism for 12 multilateral health-related initiatives and funds to coordinate and align efforts (Rifat Hossain, interview 14 August 2020). These actors include the SDG 3 custodians of UNICEF, UNAIDS, and the WHO (World Health Organization, 2019). The UN Secretary General requested the WHO to create the Global Action Plan in collaboration with other agencies. The Global Action Plan has some overlap with the other major initiative around SDG 3. The plan addresses similar issues to those targeted by the Health Data Collaborative, including the prevailing institutional and data fragmentation in the health area. Signatories of the plan committed to a cultural shift towards a more purposeful and systematic collaboration (World Health Organization, 2020). The plan started from a joint mapping exercise where agencies identified inefficiencies, overlap, and shared priorities.

Complementary to interorganisational knowledge sharing, conflict resolution, and problem solving, signatories to the Global Action Plan aimed to establish a more systematic form of external knowledge sharing, resembling an SDG 3 data hub. Milestones for 2023 are being identified for more than 50 health-related SDG targets, all to be translated into a dashboard that can be used as a diagnostic tool (World Health Organization, 2019). Here we also observe some overlap with initiatives led by the WHO; multiple indicator bases have proliferated outside the Global Action Plan that integrate subsets of the SDG 3 indicators. Examples include the WHO-led Human Reproduction Programme, which includes more than 20 SDG indicators, and the WHO-led Global Strategy for Women's, Children's and Adolescents' Health (2016–2030).

In addition to these initiatives, the WHO also leads in joint advocacy. In the context of the High-level Political Forum, this happened during the review of SDG 3 and side events that the WHO organised in 2017–2019. Although the expert review on SDG 3 was co-organised by most custodians for SDG 3, which allowed them to engage broadly in knowledge sharing and evaluation, the WHO moderated the session (United Nations SDGs Knowledge Platform, 2017a). In 2017, the WHO co-organised an HLPF side event on UHC2030, a partnership advocating universal health coverage that includes UNAIDS, UNICEF, and the OECD (United Nations SDGs Knowledge Platform, 2017b). When the 'Every Woman Every Child Strategy for Health' was presented that same year, the WHO and UNAIDS participated in that event, although the strategy is also supported by UNICEF and the OECD (Every Woman Every Child, 2017). In 2019, three WHO representatives (and one from UNAIDS) were involved in the presentation of the Global Action Plan, contextualising it and moderating and participating in the panel. The WHO was clearly positioned as the lead for SDG 3 in these contexts.

3.1.3 | In practice, initiatives struggle to realise commitments and partially overlap

The main success of the Health Data Collaborative might be found in the realm of advocacy, indicated by the attention generated by the initial launch, working plan, and global public goods developed by working groups (Craig R. Burgess, interview 13 August 2020). Between late 2018 and late 2019, the initiative ran into challenges, causing a hiatus in its functioning. Meetings were not held, conflicts arose, and members became disgruntled. This was caused by several factors.

First, the WHO secretariat suffered from capacity limitations because of reorganisations, limited funds, and its burdensome technical leadership role. Second, buy-in from custodians and other actors was limited because of the Collaborative's focus on national-level alignment, which required operational work not all partners were interested in. Third, most international civil servants—especially focal points of custodian agencies—had to serve outside their normal mandates. Fourth, although participants agreed on the Collaboratives' mission, they were not reliant on its limited resources, allowing working groups to slowly start operating more independently, or 'disconnect' from the Health Data Collaborative, as this allowed coordination without 'being coordinated' (Craig R. Burgess, interview 13 August 2020). Lastly, the flexible governance structure of the collaborative led to confusion among international agencies, donors, and philanthropic

agencies. Some levels of formality and accountability were desired, given the budget involved and deliverables to be concluded.

The WHO then restructured the Health Data Collaborative, beginning with a stakeholder assessment to gain ideas for a more effective governance arrangement. This resulted in a new workplan for 2020–2023 that reflected the WHO's commitment to balancing its own leading role and the perspectives of the different constituencies. The governance structure became more representative, especially through the creation of constituency stakeholder groups. Co-leads for the working groups from these constituencies were actively sought, as most are still staff members from the WHO.

Although some agencies appreciate the added value of the 2019 Global Action Plan, others claim that it completely overlaps with the Health Data Collaborative. Indeed, both initiatives establish a coordination framework without major funding with participation of global level actors that aim to facilitate country-level action. One Global Action Plan working group, co-led by the WHO, even focuses on identifying overlaps and synergies with the Health Data Collaborative (World Health Organization, 2020, p. 25). It is striking that both initiatives are led by the WHO. One interviewee summarised that 'the Global Action Plan initiative appears to overlap with the Health Data Collaborative, but allows WHO to lead the initiative, while still supporting the Health Data Collaborative' (Mary Mahy, interview 11 August 2020).

The Global Action Plan may be seen as a way for the WHO to gain a stronger lead than in the case of the Health Data Collaborative, especially after this initiative ran into governance challenges. In fact, the WHO (co-)leads six of the eight Global Action Plan working groups, participates in all of them, and is responsible for the external knowledge sharing of the Global Action Plan (World Health Organization, 2020). Although this division of labour might be adjusted after the evaluation of the initiative in 2023, currently, the WHO clearly steers this initiative. However, it remains to be seen if the envisioned data hub will absorb the multitude of data frameworks. This seems unlikely, as these often relate closely to the core mission of agencies and are used to propose new SDG indicators, sometimes in attempts to acquire additional resources.

3.1.4 | Coordination has emerged in the case of low fragmentation of SDG 3

In short, we found that, regarding SDG 3, the low degree of fragmentation among indicator custodians correlates with high degrees of coordination, as we expected based on the literature. There is evidence of substantial knowledge sharing and joint advocacy. SDG-wide initiatives engage in problem solving and

conflict resolution, and the Global Action Plan aims to contribute to external knowledge sharing. The WHO plays a pivotal role in steering these activities, which indicates the absence of a leadership struggle that is often observed in more fragmented institutional arrangements.

Despite this high degree of coordination, these efforts still run into challenges. First, the WHO struggled to lead in the Health Data Collaborative because of reorganisations and capacity limitations. Second, efforts of custodians were complemented with other constituencies within the Collaborative's working groups, including academics, technical institutes, global health institutes, civil society organisations, countries, and the private sector. This situation has resulted in a challenge often expected in more fragmented set-ups: that of generating the buy-in to ensure commitment to problem solving and conflict resolution. Shared problem definitions resulting from initial sensemaking processes were often partly (re-) negotiated in the working groups. This broadening actor base for concrete initiatives can be expected for other SDGs as well, as SDG 17 propagates the formation of partnerships. Third, the WHO lacked the financial resources to compel other agencies to accept perceived losses of autonomy in the interest of even more centralised coordination. Especially for the Health Data Collaborative, this situation decreased the perceived legitimacy of the process, leading to a situation where 'nobody wanted to be coordinated'.

We perceive the inclusion of custodians in coordination efforts as a fourth challenge. In most cases, the UN Office on Drugs and Crime and the Population Division of the Department of Economic and Social Affairs have remained absent of larger initiatives. Although agencies do contribute data, knowledge, and expertise to the work of the other agencies, available resources limit their engagement (Karoline Schmid, interview 11 August 2020).[2]

3.2 | Coordination related to SDG 10

3.2.1 | Opportunities for coordination have come and gone

For SDG 10, all interviewees noted some degree of informal interorganisational knowledge sharing between custodian agencies, but there are no formalised initiatives for this purpose. SDG-wide initiatives are largely absent for SDG 10.

One initiative that might have led to increased coordination is the shared UN System Framework for Action that was set up in 2017 through the central document *Leaving No One Behind: Equality and Non-Discrimination at the Heart of Sustainable Development*. This framework is meant to initiate more

policy coordination to better integrate inequalities, discrimination, and equity issues in SDG monitoring, mainly by promoting common methodologies and tools. However, indicator focal points whom we interviewed saw the Leaving No One Behind strategy as a very broad transversal one, especially but not exclusively associated with SDG 10, instead underlying every SDG (Yared Befecadu, interview 18 August 2020; Rosina Gammarano, interview 7 August 2020).

Although the terminology used seemingly touched on joint problem solving and conflict resolution, the framework did not create a coordination mechanism for SDG 10, for example, in the form of custodian-led working groups aimed at tackling commonly identified (data) challenges (United Nations System Chief Board for Coordination, 2017a; Civil servant 1, interview 4 August 2020). Two custodians of SDG 10—the Office of the High Commissioner for Human Rights and UN Women—led the Inter-Agency Consultative Group on Inequalities that produced the framework; yet this group is no longer in session (United Nations System Chief Board for Coordination, 2017b). The responsibility for evaluating data disaggregation, which was the main data goal of the framework, rests with a subgroup of the Inter-Agency Expert Group on the SDGs, led by national statistical officers, where custodian agencies are merely observers (Global Partnership for Sustainable Development Data, 2017).

External knowledge sharing for SDG 10 remains limited as well. One example of external knowledge sharing occurred when the World Bank, together with the UN Department of Economic and Social Affairs, organised the SDG 10 Expert Group Meeting before the 2019 HLPF review (United Nations SDGs Knowledge Platform, 2019). The 2019 HLPF had inclusiveness and equality as main themes, and 2019 was the first year SDG 10 was reviewed. Nearly all SDG 10 custodian agencies joined as co-organisers in organising the Expert Group Meeting (World Bank, 2019). However, this meeting was mostly government-driven. The role of the World Bank, and their large delegation at the expert meeting, even surprised some custodian agencies. The World Bank's role was deemed out of sync with its high-level focus on growth rather than on inequality (Civil servant 1, interview 4 August 2020). Although the expert meeting brought actors together, it did not result in any subsequent efforts to streamline external knowledge sharing. A dedicated hub for inequality data remains absent, resulting in data dispersed throughout general or very specific databases. A general database is the World Bank's *Atlas of Sustainable Development Goals,* which provides a graph for a small selection of SDG 10 indicators in a database aiming to showcase all SDGs. Specific databases focus on single targets or indicators, like the set of approximately 90 Migration Governance Indicators that relates to SDG target 10.7 and has been developed by the International Organization for Migration (International Organization for Migration, 2020).

3.2.2 | The absence of leadership

Leadership was largely absent. For example, during the HLPF review of SDG 10, no custodian took on any public role apart from the general UN Department of Economic and Social Affairs. The same had been the case during an earlier 2017 thematic review in the HLPF on the 'multi-dimensions of poverty and inequalities' (United Nations SDGs Knowledge Platform, 2017a). Those HLPF side events in 2017–2019 that focused on SDG 10 displayed neither coordination nor leadership for this goal. A few events on single targets or indicators were organised, for example on migration governance indicators organised by the International Organization for Migration (United Nations SDGs Knowledge Platform, 17 July , 2019) and two on SDG 10 more broadly (Center for Economic and Social Rights, 2019). However, none were jointly organised by the SDG 10 custodians.

Two factors contribute to the absence of leadership. First, key actors around SDG 10 have not supported any agency as a leader for SDG 10. Interviewees do not perceive any single agency as 'the face' of inequality (Civil servant 1, interview 4 August 2020). Inequality is seen as a transversal or cross-cutting issue affecting a wide range of areas and the work of many actors (Yared Befecadu, interview 18 August 2020; Nicolas Fasel, interview 28 July 2020). In this context, 'one custodian becoming the leading agency might not be the best approach since it is a collective effort' (Yared Befecadu, interview 18 August 2020). To advance the non-discrimination and equality agenda, one interviewee mentioned 'all agencies have a role to play, which requires shared responsibility and a sense of ownership, but when everyone is supposed to be co-responsible, there may also be a risk that no-one really is responsible in the end' (Nicolas Fasel, interview 28 July 2020). Another stated that 'there are many agencies that could be leaders, without an obvious choice' (Rosina Gammarano, interview 7 August 2020). To mitigate this risk, 'capacitated leadership' was seen by some as potentially desirable (Nicolas Fasel, interview 28 July 2020).

Second, no actor has posited itself as the leading agency. The World Bank provides data for most indicators on SDG 10 and has a large staff working on 'poverty and shared prosperity' along with a long history of data collection on inequality. However, the Bank, although 'always striving to do more for impact', aims to tackle poverty and inequality as 'twin' issues and perceives its current role 'appropriate' for this purpose (Umar Serajuddin, interview 30 August 2020). The Office of the High Commissioner for Human Rights—another

potential lead agency—is still 'relatively new in this field', in the related 'work of the international statistical and data community' and 'modest given its comparatively limited resources' (Nicolas Fasel, interview 28 July 2020). Also, most custodian agencies here cover only one indicator, while leading more indicators of other SDGs. The International Labor Organization, for instance, although its work is relevant to many SDGs, focuses its core activities on SDG 8 (decent work and economic growth; Rosina Gammarano, interview, 7 August 2020), and the Office of the High Commissioner for Human Rights leads many indicators under SDG 16 (peace, justice, and strong institutions). Resource limitations are mentioned by virtually all custodians as a reason to prioritise. Agencies beyond those active on SDG 10 to take up leadership on inequality are sparse. Although UN-Habitat and the UN Development Programme co-organised work on this topic and organised a side event related to inequality in 2019 (United Nations Social Development Network, 2019), UN-Habitat already holds indicators for multiple other SDGs, and the UNDP is steering efforts to reform the UN development system.

Instead of overlapping initiatives—as might arise in a situation of institutional competition—this lack of leadership results in a general lack of initiatives. This could limit the future visibility of the issue area of inequality.

3.2.3 | Fragmentation among SDG 10 custodians prevented effective coordination

In sum, regarding SDG 10, we found that the high institutional fragmentation in this issue area correlates with a low degree of coordination among indicator custodians. Again, this supports the expectation derived from the literature. Although we found some knowledge sharing through the yearly production of the SDG report and the pre-HLPF expert review of 2019, there is no coordination beyond this. The lack of a dominant custodian agency to lead coordination best explains this lack of coordination for SDG 10. A fragmented institutional arrangement, like that of SDG 10, where none of the custodians associate themselves primarily with this goal, limits institutional coordination. Additionally, there is no underlying agreement on the necessity to coordinate and no clear direction for later efforts.

These factors are reinforced by the contested nature of inequality as a political issue. Silo-based activities, such as individual reports, strategies, and advocacy, create issue linkages that reframe SDG 10 targets in a way that blurs their emphasis on inequality. The World Bank's focus on interlinkages between SDG 10 and 1, for example, seemingly moves discussions from redistributive inequality—initially associated with target 10.1—towards multidimensional poverty, which reinterprets the reduction in inequality as stimulation of

'inclusive growth'. Efforts of World Bank officials to impose this framing of inequality have been noted since the late 2000s and were observed during the negotiations of SDG 10 (Fukuda-Parr, 2019; Saad-Filho, 2010). Such reframing complicates efforts towards a more integrated approach to the measurement of inequality, which also includes dimensions such as migration, discrimination, and relationships between countries from the Global South and Global North.

4 | CONCLUSION AND OUTLOOK

Overall, our study contributed new insights into the debate on the impact of global governance fragmentation on policy and programmatic coordination among international institutions, which has been a major research topic for a long time. We developed a multidimensional operationalisation of both fragmentation and coordination, which we used to gain novel empirical evidence from the field of SDG indicator custodianship. Our comparative analysis of two extreme cases suggests that *there is more inter-custodian coordination in institutional arrangements that are less fragmented*, and conversely, more fragmented arrangements coincide with a lack of coordination.

Although both arrangements established interorganisational knowledge sharing initiatives, in the less fragmented arrangement these tended to be significantly more institutionalised. In the less fragmented arrangement, initiatives were also established for all dimensions of coordination, whereas in the more fragmented arrangement, only the least demanding type of coordination could be observed. Although SDG 3 profited from leadership of the World Health Organization, the dispersal of responsibility around SDG 10 complicated the realisation of the holistic approach the custodians themselves propagated.

We also identified variables that affect the strength of this inverse relationship between fragmentation and coordination. One variable is the steering capacity of a potential leading actor. Because of intraorganisational changes and insufficient capacity, the dominant actor in the case of SDG 3, the WHO itself supported overlapping initiatives. It was therefore unable to prevent inefficiencies, conflicts, lack of buy-in, and the exclusion of actors. Because custodian agencies did not receive additional funding for their tasks and most agencies cannot rely on core funding (Michaelowa, 2017), for other less fragmented custodianship arrangements, resource limitations are likely as well. For example, the UN Environment Programme, the custodian for most indicators on SDG 12 (on responsible consumption and production) but also a relative newcomer in the field of statistics, notes funding challenges as regards its indicators (Jillian Campbell, interview, 1 August 2019). A low degree of fragmentation, therefore, is more likely to

lead to strong coordination if the dominant actors have steering or orchestrating capacities (Bernstein, 2017), which requires sufficient resources to take on new functions.

A second variable that affects the strength of the inverse relationship between fragmentation and co-ordination are the underlying problem structure and level of disagreement about the problem at hand (also Hoppe, 2018). Regarding SDG 10, governments still dispute the rationale of addressing inequality, how to define it, and the need for concrete targets. Consequently, no organisation was given a leadership role in this area, resulting in custodian agencies associating themselves more closely with other issue areas. Fragmentation then results from, as well as perpetuates, inequality as an unstructured policy problem, as it creates a vacuum in which a lack of leadership complicates streamlining of data collection and monitoring. For countries that prioritise other goals, a fragmented governance architecture might even be a convenient way to avoid accountability, as the object for which they are to be held to account remains ill defined (Kramarz & Park, 2016).

Additional research is needed here to study if other goals in a disputed issue area also suffer from lacking coordination. The goals on affordable and clean energy (SDG 7) and sustainable production and consumption (SDG 12), with high and low degrees of fragmentation, respectively, might be interesting cases for further comparative study. A limited sense of ownership and identification with the issue area might recur for other SDG areas with high fragmentation. If so, it might become necessary to explore whether appointing and facilitating a leading actor would be possible to orchestrate, steer, or even enforce a more unified approach. For SDG 10, this could lead to the creation of a new UN-based 'program for greater equality' that would serve as this goal's main custodian. Given our results, this would be especially relevant to attempts at problem solving and conflict resolution, as well as external knowledge sharing and joint advocacy.

A third and related important variable is the extent to which additional resources are provided that allow actors to 'jump on the coordination bandwagon'. Access to resources affected coordination in both cases. Broad-based coordination efforts, although sometimes observable, are limited to actors with the resources to join. We therefore assume that the challenges that we observed, such as limited participation of smaller agencies and capacity restrictions for the leading agency, will be common in other areas as well.

Finally, our findings invite reconsideration of the need to better govern the emerging system of custodian agencies. Better coordination can reduce the number of contact points that governments have to deal with and the number of data requests received,

and it can improve capacity building for national statistical officers, all of which would increase efficiency and effectiveness of data collection. As data are key for the accountability of the SDG framework, this is no luxury. For instance, in 2020 just 19% of data to comprehensively track progress across countries and over time for the SDGs was available (Dang & Serajuddin, 2020).

One fruitful direction for future research on better governance is the assessment of the capabilities of potential lead agencies in specific issue areas, which could include the UN Statistics Division, the UN Department of Economic and Social Affairs, the Inter-Agency Expert Group on the SDGs, or the HLPF. Some have also called for a 'chief statistician' to provide more leadership to the global statistical system (High-level Group for Partnership, Coordination and Capacity-Building for Statistics for the 2030 Agenda for Sustainable Development, 2018). Although the potential effectiveness of such a new function in the UN system will depend on the details of its set-up and implementation, it might help overcome persistent problems of institutional fragmentation, and it could provide additional degrees of coordination of the hundreds of indicators that are used to measure progress on the Sustainable Development Goals.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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ENDNOTES

[1] Interviewees shared their personal knowledge and perceptions. The inclusion of the three agencies whose affiliates declined our invitation would most likely not have led to a different conclusion of this study. For SDG 10, only unpublished initiatives between the two absentee organisations would have been missed. For both SDGs, relationships between these agencies and the others were identified during the other interviews.

[2] For the Population Division, their status as a Division within a Department is also mentioned as a contributing factor (Karoline Schmid, interview 11 August 2020).

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.
Appendix S1 List of interview references