CHAPTER 1

The Rise of a Regime Complex for Global Health

Global public health has emerged as a central concern of the international development effort. The tenfold increase in international resources devoted to combating epidemics since 1974 has led to a potentially unwieldy "regime complex" that some have criticized for its inefficiency and overlap. In line with regime complex theory, the global health regime is decentralized with agencies nominally overlapping in mission, "governing" global health with no command hierarchy. In short, this is the type of regime that has generated increasing discussion—and lamentation—within the international relations literature. At the same time, the decentralized nature of global health governance poses a central problem for global public health: How to improve, if not fully coordinate, collective action as the regime expands? This is a primary problem that has engendered contentious debate within the fields of international relations, development, and global public health.

This book revisits prevailing understandings of how resources are allocated in the area of public health, identifying outcomes in global health's rise that we miss by applying the regime complex literature's narrative of overexpansion. It provides an analytical lens through with we may glean insights into the regime complex for global health, thereby offering insights into the larger challenge of decentralized collective action in global health governance. Drawing from international relations theory, this book explores the complex constellation of actors—states, multilateral institutions, civil society organizations, foundations, multinational corporations, and so on—whose collective activities constitute the transnational governance of public health. From the perspective of

an author with an expertise in international relations, this book seeks to glean important generalizations that are valuable to students and scholars across the spectrum of political science, health, and development—while fully understanding the daunting challenge of merging the languages of these disparate disciplines. Applying these respective disciplinary debates is nevertheless a worthy undertaking as empirical lines between them become blurred, and the case of the regime complex for global health speaks loudly to many disciplines.

This book aims to generate meaningful understandings of an important aspect of global governance writ large, and to address a larger problem confronting global health, namely that of collective action among increasingly decentralized, independent sets of actors.

Global health governance is charged with managing public well-being by way of collective action. The global public health regime, the multifaceted locus of this collective action, is notable for increasingly specialized approaches among actors. This is a development intended to reduce inefficiencies and institutional overlap. Nevertheless there is a conventional prediction that regimes grow more stilted and inefficient as they increase in size and overlapping mandates. A 2009 symposium in *Perspectives on Politics* on the consequences of greater regime complexity found this to be true across a variety of issue areas—ranging from trade, human rights, intellectual property, security, and election monitoring.[1] We have much to worry about if the symposium's analysis amounts to a general rule about the consequences of the expansion of formal international cooperation in the twenty-first century. If greater complexity means that the global health regime is unable to expand without minimizing attendant inefficiencies, then the immediate future looks bleak for those individuals that the regime is intended to help. This also calls into question the current global agenda to expand development assistance channels toward other pressing global problems, most notably climate change, for which new north-south transfers figure centrally in the 2011 Durban plan.

If growth in resources, mandates, and aid producers is a source of inefficiency, nowhere should this be more apparent than in the arena of global health. The global health regime has grown remarkably over the past two decades and is now composed of a vast network of states, multilateral institutions and non-governmental organizations. It has origins in the creation of the World Health Organization in 1948, a specialized UN agency mandated to pursue, as stated in its constitution, "the attainment of all peoples of the highest possible level of health." It is

a vast mandate, though the means and power by which the WHO can pursue this varies. In addition to monitoring epidemics, coordinating international responses to them, collaborating with a multitude of actors, and promoting health equality, the WHO plays a central role in fostering governance structures for global health activity in the twenty-first century. Today the regime encompasses a large number of creditor states, bilateral and multilateral programs, non-governmental organizations, and amorphous "public-private partnerships." In addition to the "big-bang" of new agencies created in the late 1990s and 2000s, the regime's growth is apparent in the sheer volume of new financial resources devoted to combating disease around the world.

Much of this dramatic increase in financial resources has come in the form of Official Development Assistance (ODA) devoted to health, making health one of the fastest growing sectors of international aid. In 1974, aid to global health totaled only $1.9 billion, according to the OECD. By 2006 aid to global health increased tenfold to a record $19.6 billion. During the same period, aid to health expanded from 5 percent of all development assistance to a record 16.5 percent. This remarkable expansion includes the creation of high profile agencies such as UNAIDS, the Global Fund, and the President's Emergency Program for AIDS Relief (PEPFAR). Just as significant has been the increased number of existing agencies that have prioritized health. The World Bank has become a central multilateral player in the global public health regime, and has altered the regime's fabric considerably.[2] Growing philanthropic foundations such as the Bill and Melinda Gates Foundation are adding further to this patchwork.

A large literature in the area of global health points toward increasingly disjointed global health activity as the regime has expanded. The new money the rich world has poured into global health coffers, it argues, does not mirror the actual patterns of disease in the developing world. Laurie Garrett's provocative article in *Foreign Affairs*, "The Challenge of Global Health," caused a stir in the development community by contending that funds for global health are misallocated. Garrett notes:

> [B]ecause the efforts this money is paying for are largely uncoordinated and directed mostly at specific high profile diseases—rather than at public health in general—there is a grave danger that the current age of generosity could not only fall short of expectations but actually make things worse on the ground.[3]

Just as much current thinking in the international relations literature would predict, Garrett's critique reflects a widespread perception that the global health regime has become dollar-for-dollar increasingly inefficient over time. This book reaches a different conclusion. When viewed in its totality, the global health regime has promoted efficiency in key ways. As the global public health regime has seen its bureaucracy expand, it has also seen high levels of specialization. As the bureaucracies within the regime complex have grown larger and arguably more tangled, actors within the regime have shown a greater inclination toward reducing inefficiencies and better meeting the requirements of the global burden of disease through the development of niche activities. Specialization occurs according to issue area, as well as geography. One effect of this has been to reduce the overlapping tasks associated with regime complexity.

As the regime complex literature illustrates, the rise of a regime complex for global health—replete with numerous overlapping legal forums and actors lacking central coordination—creates serious challenges for the future of global economic redistribution. This global governance arrangement also creates opportunities that are all too belatedly gaining scholarly recognition. Evidence presented in this book suggests an important development that is often overlooked: Under conditions of regime complexity there is a surprising degree of complementarity between actors despite a lack of formal cooperation. Formal multisectoral cooperation between states, development agencies, and private actors proliferated during the rise of global health. Less discussed has been the informal complementarity that actors have engaged in through specialization. Underlying patterns of development assistance shown throughout this book are individual actors within the regime, whose roles and priorities vary starkly. Even though aid distributors have increased global health outlays, they have also narrowed their range of priority issues. Most choose to specialize in just one or two areas. Smaller actors, correspondingly, also adopt highly specialized roles such as advocacy, ground level partnerships, or resource coordination. To understand these important developments, factors hitherto under-explored in public health deserve greater attention, including emergent coordination between development and health agencies, specialization among these actors, and the emergence of a normative consensus among key actors on economic approaches to development.

In sum, these developments portend opportunities as well as challenges when it comes to the specific question of how the global public health regime allocates resources. The regime complex for global health

offers a critical empirical case for the new thinking in the IR literature that emphasizes overgrowth and inefficiency. The expansion of global governance in health did not insurmountably jeopardize resource maximization, and even encouraged efficiency. This is by no means the end of the story. By economizing health, the major institutions that have fueled its rise have also commoditized it. While formal and informal forms of complementarity emerged out of necessity during the rise of global health, this has not resolved the danger of health being subordinated to the imperatives of growth and profit.

Another hope for this book is that it will generate cross-disciplinary insights for scholars of public health alongside the expected international relations audience. Students and scholars of international relations unacquainted with public health may nevertheless find themselves unfamiliar with its basic disciplinary meanings. By "health," we are not referring merely to battling epidemics or the "absence of disease or infirmity," but "a state of complete physical, mental and social wellbeing" as the WHO constitution conceptualizes it.[4] This notion includes a wide range of epidemiological concerns—including those largely neglected by the regime. "Global public health" is itself distinct from "biomedicine," which is grounded largely in the health of the individual, and has been cited as a technologically oriented approach to individual diseases.[5] Public health, in Lee's words, "addresses the health of populations."[6] From there, the definition of public health encompasses the range of activities used to improve collective health. For many, public health emphasizes health as a non-excludable public good, and a fundamental human right.[7] Public health entails the political, social, and economic as well as biological determinants of health. It encapsulates mental as well as physical wellbeing, and the collective realization of our full human potential (though as we will see, this has been defined down to "economic" or "productive" potential by an elite consensus within the global public health regime). "Global health" departs from "international health" in regards to the reduced centrality of the nation state territory as a central driver of public health concern. Public health has "globalized" as increased political, social, and economic integration makes the issues driving public health increasingly transnational. Attendant global economic, environmental, and social forces more greatly impact global patterns of illness. Inequalities in a more competitive economy correspondingly underscore inequalities in physical wellbeing, social inclusion, and isolation.

Table 1.1 describes these key terminologies, which are persistently debated in the global health literature. Therefore these definitions

include key debates, such as that concerning the scope of the human rights orientation of public health, and health's place as a public good. The term "global health governance," discussed further below, is itself subject to these debates. The very globality of health governance is itself both endlessly expansive and frustratingly delimiting. While the definition of global health governance may be interpreted as encompassing all the world's public health crises, many crises are locally defined and do not threaten transnational activity. Hence according to predominate understandings of global health, these conditions are likely to fall under the category of neglected diseases. By contrast, conditions thought to possess globality more loudly demand governance. This "global" logic

Table 1.1. Key Public Health Terminologies and Distinctions

Biomedicine	Concerns the physical well-being of the *individual*, and emphasizes technological approaches to confronting specific epidemics.
Public Health	Addresses the health of an entire *community*, including mental and physical well-being, the realization of full human potential, and health as a public good, in addition to a fundamental human right. Perspectives differ on the normative expansiveness of public health, and how far it should extend.
International Public Health	*State-centered* logic of public health, problem definitions and solutions centrally rooted in the state. Collective action centered on bargaining among states, and state-based organization is the primary driver of regime activity.
Global Public Health	States concerned increasingly with *transnational* issues relating to globalization. Decreased emphasis on national boundaries as the primary logic behind regime action.
Global Health Governance	Collective transnational action to address public health concerns across borders. Bias toward transnational threats despite potential expansiveness.

of governance in health is hotly contested, particularly by those who see health as a fundamental human right, yet the elite consensus under discussion in this book clearly emphasizes the emergent imperatives of liberal globalization in health governance, coupling a functioning global system with combating existential threats, and fostering individual productivity.

The remainder of this chapter proceeds in three parts. The first part identifies both broader and more nuanced patterns in the development of the global health regime. This section illustrates two key findings that have thus far been under-explored: the high propensity for specialization in global health and the general proximity of global health resources with actual global need. The second part examines formal cooperation and informal complementarity that underlies specialization patterns. Through this system development agencies are effectively coordinating the distribution of resources toward global health. Conditions of increased regime density have resulted in a highly enmeshed division of labor with persistent specialization patterns among creditors. Aid producers seek to maintain their value-added, and potentially their bureaucratic relevance, by playing specialized, complementary roles. This emerges in the context of economism that pervades the global north-led international development effort. This illustrates a global consensus encouraging specialization as well as cost-effectiveness within the regime. Global health, moreover, has itself become a precondition for economic growth espoused by major figures such as the World Bank and WHO. The final part provides an overview of the data and methodological approaches taken in this book.

Is Bigger Worse?

While the international relations discipline has long studied the vast increase in international organization since 1945, regime complex studies initiated a timely exploration of the unintended consequences of a multilateral architecture in seemingly terminal expansion by the twenty-first century. As the institutions and legal frameworks that constitute global governance have grown more complicated, scholars have increasingly devoted attention to the consequences of increased size and complexity. Karen Alter and Sophie Meunier's influential study sees "nesting" as a significant reason behind the unusual continuity of what should have been a relatively modest trade dispute involving the banana industries of the European Union and the United States.[8] Regional and bilateral

commitments are "nested" when the parties to them are also bound by other, overarching legal agreements. The ensuing amalgamation of rules can potentially add complication to otherwise straightforward legal disputes. For Alter and Meunier, "institutions are imbricated one within another, like Russian dolls."[9] Their findings suggest that increasing additions of non-hierarchical frameworks—as states enter into bilateral agreements that may complicate existing multilateral ones, and vice versa—threaten an increase in suboptimal outcomes. By implication these changes are likely to increase the cost of international transactions.

The term "regime complex" was introduced by Raustiala and Victor whose study of the international legal frameworks for plant genetic resources sought to conceptualize the expansion of global governance over time and the consequent emergence of increasingly dense, complex networks of regimes.[10] For Raustiala and Victor, singular, or "elemental," regimes overlap in relationship to a single issue area, with none assuming official hierarchical authority over existing actors. There is, in their estimation, a "growing concentration and interconnection of institutions."[11] Regime complexes, they contend, "will become much more common in coming decades as international institutions proliferate and inevitably bump against one another."[12] This has sparked considerable discussion in the IR field. While new institutions are being formed, and others expand into new territory, existing agencies and bureaucracies are unlikely to simply disappear. The logical increase in institutional density will undoubtedly affect how existing regimes operate.

These studies generally reflect a pessimistic view of regimes as they expand. Indeed, new institutions created within regimes are often not hierarchical, leaving significant procedural ambiguities. This is the case in global health, which has seen a tremendous proliferation of new agencies that often serve similar functions. A variety of existing development institutions adopted responsibilities toward public health, thus blurring the line between health and economic development functions. This is likely to have far-reaching consequences according to the regime complex literature. With multiple, non-hierarchic forums, states strategically seek out those which are more favorable to their interests. The more channels that exist, the more costly navigating the regime will become for developing countries with scarce managerial resources.

Decentralization within growing international regimes has received increasing attention in the scholarly literature, with case studies finding varying results on its role in creating inefficiencies. Stephanie Hofmann's study of the relationship between NATO and the European Security and

Defense Policy—though not entirely competitive—suffers from having few incentives to cooperate, but considerable overlap in missions. This, she argues, has "clearly impeded the development of an efficient division of labor between the two institutions."[13] Judith Kelley deals directly with the case of competition among increasing numbers of agencies in election monitoring. Increased density, she argues, has a series of beneficial effects. The existence of multiple institutions can overcome deadlock, offering alternative agencies for states who may feel that existing agencies are biased against them. Moreover, the presence of multiple election monitoring agencies may increase legitimacy by reinforcing election results. But added inefficiencies are a cost of increased density. Competition creates a disincentive for cooperation. A lack of information sharing between agencies, or unwillingness to pool resources, can lead to costly overlapping and sub-optimal outcomes. Or, as Kelley puts it, "redundancies, communication failures, and waste."[14] Differing organizational biases, methods, or standards may cause these organizations to contradict each other or otherwise work at cross purposes. The regime complex literature raises important strategic questions for developing states that incorporate aid into governance: From which wealthy aid distributors do they seek support? Do they solicit input from the World Bank, UNDP, or WHO? Do prospective aid partners apply to PEPFAR or the Global Fund for assistance? Moreover, coordinating tasks should become more difficult between aid distributors, creating hard choices over which tasks to pursue when most spheres of activity already have numerous participants.

The complexity of the global public health regime extends to the types of transnational actors cooperating to address public health concerns. While this chapter shows that "traditional" nation-state actors and multinational organizations are more concertedly devoting resources to health, a diverse array of non-state actors are participating both within and outside of state-led health initiatives. In some cases, private actors are the catalysts for global health action. What the World Bank prizes as multi-sectoral approaches to health have blurred the line between public and private action in global health governance. While states have been thought to wield "hard" power in international affairs, the non-hierarchical nature of global health has meant that private actors are initiators of as well as participants in global health action.

The institutional arrangements depicted by regime complex theorists are far from perfect. Yet Victor and others have argued that conditions of regime complexity, if unavoidable, can be workable, and even

effective due to their decentralized nature. According to Victor and Keohane, the regime complex for climate change may be a disguised blessing in the absence of "any politically feasible comprehensive regime."[15] While the international community has tried and so far failed to produce a single universal treaty on climate change, a decentralized regime complex offers considerable advantages. A wide ranging set of actors may be better able to address climate change's equally diverse sets of problems if unencumbered by centralized protocols. A regime complex may have long-term adaptability and flexibility that would be lost in an "institutional monopoly."[16] The "polycentricity" of twenty-first-century regimes, to use Elinor Ostrom's terminology, has also generated discussion in the study of institutions.[17] Also speaking to the halting efforts at establishing a climate regime that is "global" in character, Ostrom argues that a localized, "polycentric" climate regime enables independent actions that may in aggregate be more effective. Like Keohane and Victor she is skeptical of the express need for centralized global action to overcome collective action problems. The multitude of problems associated with global warming are more likely to inspire a multitude of solutions.[18]

Fidler calls this a "post-Westphalian" context for global health, in which "both states and non-state actors shape responses to transnational health threats and opportunities."[19] For Fidler, global health governance takes place not from central implementation, but through an "unstructured plurality" of actors. Sounding a theme similar to what we hear from Ostrom in regards to climate change, Fidler is skeptical of calls to revert to centralized, state-centered approaches to health governance. The WHO, for its part, has recognized this new reality through its 2005 International Health Regulations (IHR) and 2003 Framework Convention on Tobacco Control (FCTC) (the first international treaty negotiated under the auspices of the WHO). These two landmark agreements, explored further in chapter 3, integrated security, trade, and human rights principles, while at the same time creating key roles for non-state actors.[20] For Fidler, the quest for a centralized global architecture to coordinate regime activity is a misguided one.

Much of the academic and popular discussion concerning global health nevertheless laments the lack of any coordinating mechanisms to rationalize the explosion of new activity taking place. Largely for this reason, much of the regime complex literature, as well as an array of critical analysis in global public health, predicts the regime to grow less effective as it expands. A nuanced analysis of aid data suggests a mixed scenario in this regard. Increased complexity, volume, and density within a regime complex do not necessarily lead to the increased misallocation

of resources. The global public health regime has grown substantially in size and complexity since the early 1990s. The most obvious of these changes is the dramatic increase in overall resources dedicated to health. The OECD's Creditor Reporting System, the main source of data for this project, collects data on aid to global health since 1974.[21] These data show that aid to health increased tenfold during that time, accelerating in the 1990s and 2000s. In the period from 2002 to 2006, total world ODA to health approached $72 billion, up from $43.7 billion over the previous five-year period. This amount is still less than what it would take to provide universally accessible care in the developing world, but has led to scaled-up responses on a variety of global health fronts.[22] Table 1.2 shows consistently rising levels of health assistance, and health's growing share of aid overall.

These patterns defied the dominant trend of declining aid in the 1990s. Once the Cold War period ended, levels of development assistance dropped off considerably. By 2000 Jean-Philippe Therien and Carolyn Lloyd declared development assistance to be "on the brink."[23] Yet even as aid declined there were also evident changes in how it was being viewed by wealthy actors. Results-based aid became increasingly important in the 2000s. Africa's economic decline in the 1990s, combined with its exploding AIDS crisis, put this region at the center of attention in international development. Economists and, increasingly, policymakers began to see reversing Africa's decline as germane to wealthy states' interests. Moreover, agencies such as the World Bank, the UNDP, and the WHO began producing reports that placed health at the center of international development. These agencies argue that improved societal health contributes to economic growth by making the workforce more productive

Table 1.2. Health's Share as a Percentage of World Aid by Five-Year Intervals

Year	*Health ODA*	*Share*
1977–1981	$13.5 billion	6.8%
1982–1986	$20b	8.4
1987–1991	$24b	8.3
1992–1996	$32.8b	12.7
1997–2001	$43.7b	13.5
2002–2006	$71.6b	13.7

Source: CRS Database, in millions of 2005 dollars.

and lifting the economic costs associated with disease. Additionally, the development community faced withering criticism associated with the structural adjustment policies of the 80s and 90s. As Therien and Lloyd argue, "after a decade dominated by the objective of structural adjustment, the much less controversial one of sustainable development has taken over as the new mantra of aid policies."[24]

Global health nevertheless became more central to international development during this time—defying the overall post-Cold War trend, also evident in table 1.2. While overall development assistance was declining, global health funding actually increased dramatically. Indeed it was during early post-Cold War years that health financing grew in both absolute and relative terms. In 1991, as the Cold War receded, overall development assistance topped $65 billion. During that year the total global health outlay was $5.3 billion, roughly 8 percent of overall development assistance. By 1993 development assistance declined to below $50 billion overall, not eclipsing that level again until 1996. Health ODA by contrast rose to $6.7 billion by mid-decade, reaching $7.9 billion by the time the rest of the aid regime stabilized in 1996. By that year aid to health comprised a 15 percent share of world development assistance. By 2000 aid to health neared $11 billion, foreshadowing yet another surge in funding that happened later that decade.

The regime governing global health today is expansive, its endpoint not entirely clear, overlapping with other spheres of global governance. According to Sophie Harman:

> Global health is a unique area of governance that integrates scientists, medical practitioners, philanthropists, governments, and international institutions with grandmothers and local communities and self-styled celebrity advocates. Global health governance involves an amalgamation of various state, non-state, private and public actors and as such has developed beyond the institutional role of the WHO and state-based ministries of health. In the most basic sense of the term global health governance refers to trans-border agreement or initiatives between states and/or non-state actors to the control of public health and infectious disease and the protection of people from health risks or threats.[25]

The overlapping "regime clusters" in global health prompted Fidler to equate global health governance to a regime complex. So many overlapping clusters manifest themselves, Fidler argues, because of a complex

array of semi-related problems in global health.[26] For Jeremy Youde, global health governance has fundamentally changed in the globalization era, and must focus on factors that transcend state boundaries. Moreover, it must, according to Youde, include a wide range of multi-sectoral actors in the process of governance while maintaining transparency and accountability.[27] Kay and Williams, not uncritically, point out the political-economic context in which global health governance takes place, making note of the "hegemony of neoliberal ideology over health."[28] This has meant that at the same time global health imperatives have received greater attention than ever, the dominant elite consensus within the regime emphasizes individual responsibility over community values. The emphasis on "self-care" by implication undermines the notion of health as a fundamental right.[29]

The global health regime's transformation sparked fierce expert debate over resource allocation. As Kates, Morrison, and Lief argue, "investments in health seem to be uneven, raising cautionary notes about the global community's ability to meet, let alone sustain, financial needs over time."[30] New funds may be there, but priorities are awry. Science reporter Laurie Garrett—who sparked considerable debate over the issue in *Foreign Affairs*—states this position most forcefully. She contends that aid is "stovepiped" down to specific issue areas while ignoring broader health conditions:

> Stovepiping tends to reflect the interests and concerns of the donors, not the recipients. Diseases and health conditions that enjoy a temporary spotlight in rich countries garner the most attention and money. This means that advocacy, the whims of foundations, and the particular concerns of wealthy individuals and governments drive practically the entire global public health effort. Today the top three killers in most poor countries are maternal death around childbirth and pediatric respiratory and intestinal infections leading to death from pulmonary failure or uncontrolled diarrhea. But few women's rights groups put safe pregnancy near the top of their list of priorities, and there is no dysentery lobby or celebrity attention given to coughing babies.[31]

The new influx of funds, Garrett argues, does not correlate well with the global burden of disease. Instead of addressing in-country health issues holistically by boosting local health infrastructures, global aid producers rely too heavily on "vertical" disease-specific programs. This

contention has been regularly reiterated in the global health literature. Shiffman's study of the effects of increased funding for HIV/AIDS found evidence of a "displacement effect" on other health issues, including general health infrastructure and population funding.[32] Mackellar's study of the CRS database's aid to health also noted disproportionate allocation toward communicable diseases characterized as "poor," such as respiratory illness, HIV/AIDS, and malaria. Drastically underemphasized by the global health regime, according to Mackellar, are non-communicable diseases like heart disease, cancer, and stroke, which receive no directly assigned development assistance.[33]

Into this debate have also emerged critics of aid itself, led by the popularity of William Easterly's *White Man's Burden* and Dambisa Moyo's *Dead Aid*. By this school of thought, aid is beyond reform—inevitably inviting waste, corruption, or dependency in developing countries.[34] The logical policy implication in that case would be to abolish rather than reform the project of global redistribution through public financing. In its place Moyo calls for a centrality of market principles far beyond that currently espoused by the development consensus. Recipient states should forego aid and instead engage the vicissitudes of creditors in capital markets, which Moyo argues would incentivize reform through market discipline.[35]

Along with a greater volume of aid has come greater bureaucratic complexity. There has been a massive merger between public health and economic development. This syncretism combines what are arguably separate regimes toward a common purpose: fostering growth by reducing the global burden of disease. A variety of development agencies have prioritized global health, particularly the World Bank and United Nations Development Programme (UNDP), with both playing a central role in shaping global health's political agenda. There was also a proliferation of altogether new actors as global health gained traction as a central development issue. This includes the creation of new agencies which are narrow in scope with a great deal of overlap, such as PEPFAR and the Global Fund to fight AIDS, Tuberculosis and Malaria.

Table 1.3 summarizes select major health agencies that emerged since the late 1980s, contributing to a denser global regime.[36] Table 1.3's partial display of an expanded regime suggests an element of truth to the case made by Garrett and other regime critics: There are a growing number of emergent actors whose activities are vertical, or narrow in scope, avoiding holistic approaches to public health. The 1990s and 2000s have witnessed a "big bang" of new agencies not seen since the post-war period, and a large number of them were vertical. This is indica-

Table 1.3. Select Emergent Global Health Agencies

Agency	*Launched*	*Headquarters*	*Type*	*Purpose*	*Issue Breadth*	*Operating Budget*
President's Emergency Program for AIDS Relief (PEPFAR)	2003	Washington DC	Bilateral	HIV/AIDS prevention and treatment, with particular emphasis on Africa.	Vertical	$6.9b
The Global Fund to Fight AIDS, TB, and Malaria (GFATM)	2002	Geneva	Multilateral, Public-private partnership	Addressing prevention and treatment, for HIV/AIDS, Malaria and Tuberculosis.	Vertical	$3.1b
Global Alliance for Improved Nutrition (GAIN)	2002	Geneva	Public-private partnership	Global support and advocacy for nutrition programs.	Vertical	$28.2m
Stop TB	2001	Geneva	Multilateral	Coordinating response to tuberculosis crisis, improving resource environment.	Vertical	$46.9m
Clinton Foundation	2001	New York	NGO	Broadly addresses public health, in addition to other development and diplomacy issues.	Broad	$297.5m
GAVI Alliance	1999	Geneva	Public-private partnership	Global immunization initiative.	Broad	$1b

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Table 1.3. *Continued.*

Agency	*Launched*	*Headquarters*	*Type*	*Purpose*	*Issue Breadth*	*Operating Budget*
Roll Back Malaria	1998	Geneva	Multilateral (WHO sub-agency)	Anti-malarial activities.	Vertical	$17.2m
International AIDS Vaccine Initiative (IAVI)	1996	New York	Public-private partnership	AIDS vaccine development.	Vertical	$97.9m
Joint United Nations Programme on HIV/AIDS (UNAIDS)	1996	Geneva	Multilateral UN agency with some NGO governance	Coordinating AIDS response, improving resource environment.	Vertical	$182.4m
Bill and Melinda Gates Foundation	1994	Seattle	NGO	Development agency seeking high-tech market-based solutions with special emphasis on global health.	Broad	$2.6b
Partners in Health	1987	Boston	NGO	Promotes equality in health, clinic and hospital development, including treatment of communicable and non-communicable conditions in select poor countries.	Broad	$91.9m

tive of increased specialization—and also reflective of the "stovepiped" channels of aid lamented by Garrett.

Over time the global health governance has evolved from an elemental regime that is state-centric, or "international" in nature, to a "global" regime complex operating according to a transnational set of understandings. Harman contends that this evolution occurred simultaneously with the expansion of neoliberal globalization in the 1970s.[37] The evolution toward regime complex characteristics evolved gradually, accelerating in the 2000s as support for global health became enlarged and multifaceted. It is important to note at this point that a large number of actors and greater funds are likely but not sufficient conditions for a regime complex in global health. Table 1.4 notes these obvious elements

Table 1.4. The Regime Complex for Global Health

	Elemental Regime	*Regime Complex*
Issues	Public health/biomedical focus	*Multiple*: Trade, security, human rights, globalization, poverty, development, biomedical, etc.
Actors	"Westphalian" state-led hierarchy	"Post-Westphalian" absence of hierarchy among states and various private actors
Globalism	"International" health	"Global" health, neoliberal
Financing Channels	State-led, ODA	Varied, "partnerships," multiple forums
Leadership	State and multilateral organizations	Open ended: state leaders, development entrepreneurs, celebrities, "open source" participants
Centralization	Centralized, coordinated action	Decentralized action, but with formal cooperation and informal complementarity
Available Funds	Low	High
Number of Actors	Small	Large

of a changed regime, but makes note of other equally important criteria. An absence of hierarchy among actors is a critical characteristic, and in the "post-Westphalian" system of global health, this has manifested itself in several ways. Once established around the WHO as the central forum for global health activity, the regime has decentralized over time, with key decisions made by other actors including non-state entities. This shift has been actively encouraged by World Bank, whose approach to health has robustly promoted cross-sector approaches. In many cases, private actors such as the Bill and Melinda Gates Foundation take action independent of states or "Westphalian" actors.

Moreover, the sphere of issues connected to health has, to use the parlance of regime complex theory, come to overlap. Global health's rise has been tied to the transnational concerns of a rapidly globalizing world during the 2000s. Trade, security, urbanization, economics, and human rights serve as logics for global health governance.[38] Health has merged with other global logics in the realm as ideas as well as with complicated institutional realities. As the lines have blurred in this global constellation of actors, the regime has become what Fidler calls "open sourced."[39] A variety of actors act independently to impact global health, influencing the proceedings either through local action, global advocacy, or the independent direction of funds. The regime complex for global health is a chorus without a conductor.

Conformity with Disease Burden: Data and Limitations

In addition to using institutional theory to answer questions raised by three distinct literatures (those of international relations, global health, and development), this book adds key dimensions to the emergent debate over the use of international aid by further disaggregating the OECD's development assistance data—thereby offering fresh perspectives on the burning question of how aid is being used. In addition to analyzing aggregate distributions of official development assistance since 1974, this study generates surprising findings by looking at this data for individual OECD members, as well as specific development agencies. This reveals the hitherto underexplored patterns of specialization between aid producers, introducing a key nuance to interdisciplinary discussions on aid distribution.

As we have seen, great normative debate has ensued over how centralized the regime should be. The global distribution of resources, mea-

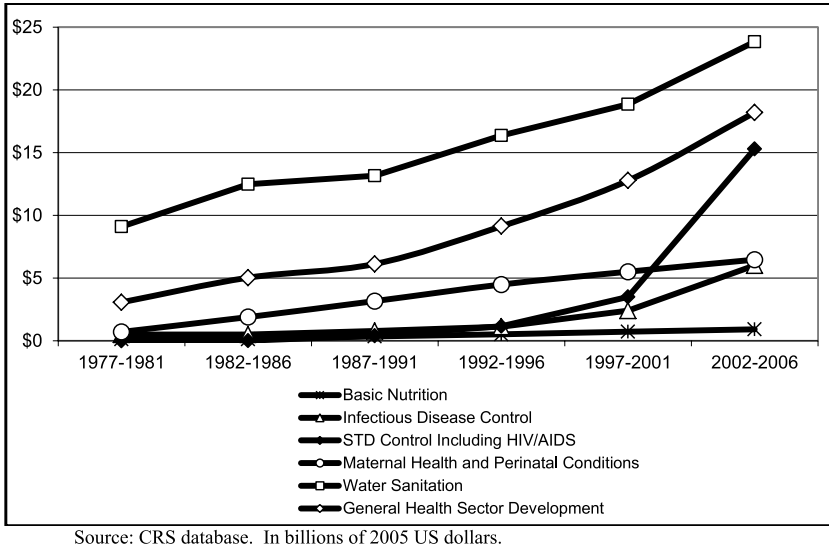
sured in terms of development assistance, reflects the burden of disease to a greater extent than that suggested by the regime's critics. Data for this book show that there are areas in which global funding allocations do not perfectly correlate with disease burden. The two areas where this is the case are child health and basic nutrition, which are two of the deadliest epidemics in the lesser developed world. Perinatal conditions are the leading cause of death among children under fifteen years of age, comprising 20 percent of all deaths in this age group.[40] They account for 6.4 percent of disease burden in low and middle income countries, more than HIV/AIDS (See table 1.5).[41] Maternal health and perinatal concerns have seen a marked decline in their share of health ODA, from a peak of 13.6 percent in the period from 1992–1996, to 9 percent between 2002 and 2006. Development assistance toward basic nutrition has undergone a similar, albeit less abrupt pattern. Aid in this category confronts arguably the most dangerous risk factors in the impoverished world, accounting for 14.2 percent of disease burden.[42] Yet aid to basic nutrition remains remarkably low, peaking at 1.7 percent in the period from 1997 to 2001 and dropping to 1.3 percent between 2002 and 2006.

Issues of general health infrastructure, thought to be under-prioritized, are actually a high priority for DAC members. Figure 1.1 shows the total world health ODA toward six major health issues addressed by the global public health regime. The graph shows the change over

Table 1.5. Leading Disease Burdens in Low and Middle Income Countries (2001)

Health Issue	*Share of Disease Burden (%)*
Perinatal Conditions	6.4
Lower Respiratory Infections	6.0
Heart Disease	5.2
HIV/AIDS	5.1
Cerebrovascular Disease	4.5
Diarrheal Diseases	4.2
Unipolar Depressive Disorders	3.1
Malaria	2.9
Tuberculosis	2.6
Chronic Obstructive Pulmonary Disease	2.4

Source: Disease Control Priorities Project



Source: CRS database. In billions of 2005 US dollars.

Figure 1.1. World Health ODA to Major Issue Areas

six five-year intervals reported by the OECD. These six health issues represent the majority of the disease burden in low- and middle-income countries (the combined recipients of all ODA), accounting for all health ODA during these periods. General health sector development and water sanitation have consistently been the regime's top priorities and both received significant gains in recent years despite the emergence of HIV/AIDS as a central priority. According to OECD calculations, aid to health infrastructure affects a variety of health emergencies. Just as importantly, it provides the only form of ODA within the CRS's categorization system that addresses non-communicable diseases (such as cancer, heart attack and stroke) which have become the largest sources of disease burden in low and middle income countries combined.[43]

Similarly, water sanitation addresses one of the largest concerns in the global public health regime. Its place as a high priority is consistent with its position as a leading detriment to health. Several key realities threaten to spread waterborne disease: 884 million people lack clean drinking water, while 2.6 billion lack access to basic sanitation, according to the UN.[44] After modest gains, however, HIV/AIDS was the largest overall beneficiary of new funding for global health during the last decade. During the period between 2002 and 2006 funding for HIV/