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Into the Machine: Economic Tools, Sovereignty, and Joy in a Global Health Institution

Since the early 1990s, the World Bank and Inter-American Development Bank have led efforts advocating the use of economic tools in setting priorities for health spending in poor countries. But while these powerful global health institutions present economic management as the key to improving health, they often fail to implement even their own policies requiring the use of economic tools for health project planning. In these institutions, economic tools operate beyond application for decision-making, becoming simultaneously a site of tensions regarding sovereignty and sites of enjoyment for economists at development bank headquarters. This article traces the ways that economic tools are both deployed and left aside across development bank networks, and in the process are productive of both affect and power. Attention to frictions in the use of economic tools ought to help motivate more just global health governance, taking into account political considerations that are built into expert practice. [economics, cost-effectiveness analysis, World Bank, Inter-American Development Bank, Guyana]

In the late 1980s, Rafael Nunes became the first Brazilian citizen to receive a PhD in health economics, and he returned from his doctoral studies in the United States to begin teaching courses in health finance at the University of São Paulo's medical school. When we met in Washington, DC, during my fieldwork there almost 25 years later, Nunes had spent most of his career working as a health economist for the World Bank and the Inter-American Development Bank, and he stressed to me how much these institutions had contributed to transforming international and global health during this time—a transformation in the very intellectual bases of the fields, especially the centrality of economic concepts, he argued. He spoke of his early years teaching health economics in Brazil, when students and health professionals often argued that his work went against the fundamental principles of medicine by prioritizing economic efficiency over human life. But Nunes contrasted this with what he called the subsequent “universalization” of health economics in medical education internationally, arguing that students around the world now clamor to get a space in the economics courses for health practitioners offered by the World Bank.

In stark contrast to the international health literatures of the 1970s and 1980s, global health research and policy literatures now abound with discussions of opportunity costs, cost-effectiveness analysis, and demand modeling (Adams 2013; Reubi 2013). Anthropologists have critiqued the use of such economic tools as a reductive and even profit-driven approach to public health—part of a global trend toward prioritizing economic considerations (e.g., cost, or return on investment) above others (e.g., social solidarity and universal access), and framing a broad array of problems and relationships as economic in nature, with economists framed as the most relevant parties for making decisions in this area (Adams 2013; Birn et al. 2009; Erikson 2015; Murphy 2017; Sridhar and Tichenor 2017). These scholars have demonstrated how a focus on economic decision-making often comes at the expense of taking into account the social dynamics and histories that are crucial to today's health problems. At the same time, many health policy actors have heralded the growing prominence of economic tools in global health as a crucial move for efficiency. But both proponents and critics have attributed the prominence of economic expertise in global health to the recent centrality of the World Bank and other international financial institutions in setting international health priorities and in implementing global health interventions (Jamison et al. 2006, 2013; Thomas and Weber 2004).

Throughout much of the late 20th century, the World Bank and Inter-American Development Bank provided loans to low- and middle-income countries for large infrastructure projects (e.g., dams, roads, etc.) aimed at increasing industrial and agricultural output, using funds generated through global capital markets as well as contributions from member countries including the United States and the nations of Western Europe (Kapur et al. 1997). However, as a part of the institutions' efforts to expand their lending in the last decades of the century, these banks increasingly came to envision public health as part of their development mandate (Goldman 2005). Development banks have been described as machines of ever-expanding reach, enrolling critics and moving into increasingly broad areas of intervention (Danaher 2002; Pincus and Winters 2002; Sharma 2008; Woods 2006). But while development banks have consistently emphasized the importance of economic calculations for guiding public health efforts, the institutionalization of economic tools in global health programs has been far from smooth or complete, even in development banks' own efforts.

Based on 18 months of ethnographic research at development bank headquarters in Washington, DC, and country offices in Guyana, this article traces contradictory tensions in the ways that economic tools for global health are deployed and left aside across development bank networks, and, in the process, are productive of both affect and power. Development banks' approaches to economics and health have been fundamentally bound up with the austerity logics that have devastated health systems in many parts of the world over the past several decades by gutting health budgets (Pfeiffer and Chapman 2010). But such internationally circulating logics and associated tools operate with important frictions and reformulations in practice, which shape the texture of social relations and relationships of power (Dilger et al. 2012; Engle Merry 2006; Riles 2000; Tsing 2005). Recourse to codified techniques and tools have effects extending beyond a narrow technical understanding of the tools' outputs, from masking the political relationships of the

terrain (Ferguson 1994) to enabling particular relationships of political economy (Adams 2016).

This article focuses on the set of economic tools most commonly used in public health—those used to analyze the economic efficiency of a health intervention—and investigates the ways that these tools operate in the global health efforts of international financial institutions. Health economists refer to this group of tools, which includes cost–benefit and cost-effectiveness analysis, as “economic evaluation,” “economic analysis,” or “cost analysis.” Since the early 1990s, development banks have advocated their use for prioritizing which health programs should be funded both publically and privately. But while development bank researchers and policymakers have strongly promoted the use of these tools for public health, my ethnographic work reveals that the tools are nearly absent from the practice of project planning at both the World Bank and the Inter-American Development Bank. And while both banks have policies requiring the use of such economic analyses, projects are consistently approved without them. In practice, development banks’ operational teams have often sidelined economic analyses in setting priorities for health lending. But while development banks’ health work is far from the picture of economic calculation advanced by these institutions, these economic tools have operated far beyond their simple application (or lack thereof) for project planning, becoming sites for debates over sovereignty, and creating space for professional joy and aspirations among development bank health economists.

Expert practices in health have been a central arena through which the power of states has been remade in the late 20th and early 21st centuries, both through the “emptying out” of certain spaces (Peterson 2012), and through the development of what Paul Wenzel Geissler and colleagues have framed as the *para-state*, where national governments continue to maneuver for and wield significant power in health even as their sovereignty has been fragmented (Wenzel Geissler 2015). There are important differences in how trends in the history of the state, as contested a concept as it has been (Abrams 1988 (1977); Bourdieu 1999), have unfolded on the African continent as opposed to Latin America and the Caribbean, especially as it pertains to health (Noy 2013, 2017). The Brazilian “activist state” leading HIV treatment efforts in the face of international financial institutions attempting to drive the process (Biehl 2007) looks quite different from the sidelining of African states through the “therapeutic domination” of their populations by international actors (Nguyen 2009), or even the ways that the Tanzanian government and others on the continent position themselves as obligatory passage points for externally funded global health programs (Gerrets 2015). And while small Caribbean states may not be able to mobilize power in relation to international actors to the extent of the Brazilian government, health programs in the Caribbean have also been an important site for negotiations over sovereignty and governance in relation to international actors (Whitmarsh 2008). In the face of the negotiations of postcolonial health professionals and biomedical researchers in global health programs, the use of economic tools catalyzes an important set of power and social relations among actors, as I describe here.

After an initial discussion of my research methods, I begin this article with an analysis of the relationships and assumptions that are built into the economic tools under examination here. I then draw on my ethnographic research with development

bank health programs in Guyana to show how economic tools have become a site of debates over sovereignty in development bank health programs. In the last section of the article, I draw on my research at development bank headquarters to show how the affective relationships and aspirational visions advanced by bank researchers, even as economic analyses are sidelined in operational practice, function as an important site in the power of economic tools. Tensions in the use of economic tools for global health cannot simply be eliminated. Such frictions are inherent in the ways that technologies bring with them built-in assumptions and power dynamics (Haraway 1991; Latour 2005; Noble 2018; Parthasarathy 2017; Winner 1980). But attention to the negotiations that surround the use of economic tools is crucial to designing health programs that take into account the messy realities of these specific, seemingly objective, tools. Global health initiatives like those surrounding Universal Health Care continue to be built on the basis of tools like those discussed here. Understanding the ways that these tools operate in practice is necessary for creating systems that more justly consider the politics built into expert tools, whether that is as part of efforts to gradually reform current approaches or to radically remake international orders.

Methods of Observation

This article is based on 18 months of ethnographic research in World Bank and Inter-American Development Bank country offices in Guyana and at the Washington, DC, headquarters of the two institutions. This involved 10 months of participant observation as a member of project teams for two health loans negotiated between these institutions and the Government of Guyana, one focused on eliminating neglected tropical diseases and the other on improving nutrition. My desk was situated in the central office of the project on neglected tropical diseases, alongside the bank's representative to the project (an external consultant) and the Ministry of Health's representative to the project (a senior Ministry of Health nurse), placing me in the center of the team's daily interactions. I attended all project team meetings for project design, implementation, and evaluation, and was included in project team email correspondence, in addition to daily participation in project implementation activities. Beyond project-specific efforts, I participated in health policy planning meetings across these institutions and Guyana's Ministry of Health.

At bank headquarters, I conducted eight months of ethnographic research on the institution's health policies, programs, and projects, including program and project design, implementation, and evaluation. This involved observation of health division meetings and events, analysis of documents circulated within the division and outside of the institution, and interviews with over 40 practitioners. Below, I begin with a scene from this research in Washington, DC.

Economic Analysis: Methods of Calculation

As we filed into the noon lecture in the World Bank's main complex, Angelo nudged his colleague and commented grinningly, "I'm looking forward to hearing what they have to say about distribution." The Italian health economist had done his doctoral work in the United Kingdom and had been working in Washington, DC,

in the decade since—first with the Inter-American Development Bank and then with the World Bank. He had been having a debate with his American colleague about economic analysis for health programs about whether and how to take into account the demographics of which members of society are contributing costs and which are reaping benefits. Just a few days before, Angelo had somewhat heatedly dismissed this American colleague, James, as too fresh out of school to understand that such calculations were “just not practical.” But in today’s panel on cost analysis for health, some of their more senior colleagues were likely to shed light on their debate.

The cost analyses that Angelo and James were debating can be conducted using several different tools. Cost-benefit analysis is a well-known tool that requires comparing project costs and benefits in the same metric—most commonly monetary value. However, health economists have long recognized the moral and practical obstacles of putting monetary values on human health, and have often turned instead to cost-effectiveness analysis, in which costs can be measured against a health outcome (Drummond et al. 2005). For example, one could measure how much it costs to avert a case of malaria (the health outcome) through the distribution of insecticide-treated bed nets versus through case management with chloroquine (Morel et al. 2005).

In the mid- to late-1990s, the World Bank became well known in international health circles for its promotion of “cost-effectiveness thinking” and the idea that strategic health investment is a key to generating better health, although health practitioners in many parts of the world were concerned that this meant valuing economics at the expense of clinical expertise and material resources. Researchers at World Bank headquarters advocated using cost-effectiveness analysis to “maximize efficiency in purchasing health” by identifying interventions that would return a great deal of “health” in relation to their cost, as one proponent phrased it (DJ Interview 2015). In reports and at events that the World Bank hosted for public health practitioners and policymakers, World Bank researchers advocated measuring health benefits based on the Disability-Adjusted Life Year (DALY), a weighted measurement in which nonlethal disease states (e.g., neck pain) are measured as a percentage of a year of life lost, and then added to the total number of years of life saved through interventions in lethal diseases (Jamison et al. 1993; World Bank 1993, 1994).

But what percentage of a year of life lived with a missing limb, for example, would be equivalent to a year of disease-free life? And can one really rank certain forms of human life as more valuable than others, and try to transform these value judgments into quantitative measurements? For example, the World Bank’s 1993 World Development Report advocated weighting the years of life when people are generating income as more valuable than years of life saved for the elderly, which was a highly controversial stance (Arnesen and Nord 1999; Sayers and Fliedner 1997). And while public health experts around the world were quick to question the assumptions on which these calculations were based, such experts have paid much less attention to the ways that the DALY, by breaking life into fractions to be added and subtracted for the purpose of economic calculation, opens life up as a timeline of investment to be managed both by global health authorities and by individuals themselves (Kenny 2015).

The DALY was developed in the early 1990s specifically with the goal of facilitating the sorts of cost analysis that Angelo and James were debating at World Bank headquarters two decades later. While the DALY provides a metric for measuring the benefits of an intervention, evaluating an intervention's cost is not straightforward either. Just as the DALY incorporates important assumptions about what should count in global public health (e.g., economic productivity) and how it should be counted (e.g., through quantitative means; see Adams 2013), the tools of cost analysis incorporate their own crucial assumptions. This is especially clear in Angelo's argument that cost analysis need not consider the ways that costs are distributed across societies, primarily for pragmatic reasons—because this type of calculation would not fit easily into standard forms of cost analysis.

At the World Bank's panel that day, two of the institution's top economists and an external consultant highlighted what they saw as the most significant debates in cost analysis for health. These included questions of whether to focus on financial as opposed economic costs (e.g., whether productivity costs and externalities ought to be included) as well as short- versus long- term analyses (e.g., over what time span should benefits of a health intervention be expected). The external consultant on the panel, a professor of health policy at the University of Pennsylvania, emphasized how health economists had refined theories on discount rates to value the long-term effects of today's health efforts, and had developed methods for analyzing utility to take into account the many objectives of a single intervention beyond narrow effects on a specific health outcome. As the panelists spoke, it was clear that the tools of cost analysis had been substantially expanded to respond to critiques in these areas—that cost analyses were too short term and too narrow in their focus. In the process, these expanded methods increasingly transform questions of social context into the language of economics and maintain this analysis in the realm of economists—framing cost analysis as an overarching tool that can integrate across concerns of all types. Even so, not one panelist raised concerns about the distribution of costs across societies, which Angelo was sure to emphasize as we left the lecture room, strolling to the elevator bank to head back to the afternoon's tasks. But these questions about what should count in planning health programs appear quite different in discussions with development banks' clients—a perspective to which I turn next.

Economic Tools and Sovereignty Debates

Sitting in an air-conditioned meeting room, blue-tinged neon lights overhead and the sound of soca music on the radio of a car passing by on Brickdam Street, the directors of the Ministry of Health's seven program areas jotted notes on the consultant's presentation. Guyana's Ministry of Finance had arranged an initiative with the World Bank to implement a new software tool meant to help governments plan their health budgets by prioritizing spending on the most cost-effective health interventions.

After the World Bank consultant—an older Pakistani economist in a crisp white shirt and dark suit—finished his presentation on the results of the budgeting exercise, the director of the Health Ministry's Disease Control Program spoke up. The middle-aged, Afro-Guyanese physician began: "Can you please go back to

your slide regarding the demographic information you've applied through the software?" The consultant flipped back to a slide with two charts. The first chart listed Guyana's racial breakdown: 43.5% Indo-Guyanese, 30.2% Afro-Guyanese, 9.1% Amerindian, 16.7% Mixed. The second presented historical population information as well as a forecast of population growth, together covering the period from 2006 to 2026.

Dr. Yearwood—the director of the Disease Control Program—continued, "I have to say that your population predictions don't seem at all likely." They were based on an out-of-date census, she noted, and a series of flawed population studies by Guyana's Bureau of Statistics. The politics of her claims were not lost on those in the room. It was clear that she referred to widely circulating accusations that the People's Progressive Party (PPP), popularly understood as the party of Indo-Guyanese, was manipulating population statistics to obscure rapid emigration. Many people outside of the PPP argued that the true statistics would reflect the scale of discontent with PPP governance during the past 19 years in which the party controlled Guyana's executive branch. And the PPP was in a particularly tenuous position at the time. While the party had won elections by large margins in the late 1990s and early 2000s, the PPP was only narrowly able to retain control of the executive branch in 2011, despite losing the popular vote, because the majority vote was divided among opposition parties.

The PPP had controlled the Guyanese government throughout most of Dr. Yearwood's career, and with it the Ministry of Health. Beyond appointing the head of the Ministry, the party played a major role in establishing the country's health strategy and approaches to public health. But when Dr. Yearwood first began her public service in the Ministry, and before that when she won a government scholarship to attend medical school in Cuba, it was under the People's National Congress (PNC). The PNC at that time was headed by Guyana's socialist leader Forbes Burnham, and the vast majority of today's Ministry of Health leadership completed their training in either Cuba or the Soviet Union during this period. In the post-independence period, Guyana's government had deemed it a better use of resources to educate small numbers of physicians outside of the country rather than establish their own medical school, and the first institution for advanced medical training was not established in Guyana until 1985 (Ramnath 1998). In the 1970s and 1980s, when most of today's senior members of the Guyanese Ministry of Health were trained, Guyana's socialist government supported small numbers of fellowships to train physicians in Cuba and the Soviet Union and employed a substantial cadre of Cuban physicians. In 1984, over half of Guyana's physicians were either Cuban citizens or had been trained there (Doma-Nguez 1989). Along with many of her colleagues, Dr. Yearwood had been trained in Cuba in the tradition of social medicine, including the idea of medical practice as a central aspect of decolonial, anti-imperialist praxis.

Sitting next to Dr. Yearwood at the World Bank budgeting meeting was a young Guyanese health economist who had just graduated with her master's degree from the University of York, making her the only person with a degree in health economics out of the 751,223 residents of Guyana—if the World Bank and the Guyanese government's numbers were to be trusted. Ms. Anand had returned from England to work in Guyana's Ministry of Health, and she had been placed

on the project team implementing the World Bank software tool for cost-effective health budgeting. But despite the cachet of the World Bank and the group of foreign and Guyanese economists on the project team, Anand explained that the team “could never get the buy-in from the Ministry of Health program heads. They didn’t believe the output of the tool” (GA Interview 2015). In conversations and correspondence following the budgeting meeting, the World Bank project team stressed to the Ministry of Health program heads that the tool had been tested internationally and that it incorporated the most up-to-date expertise in health economics.

Three months after the initial meeting, the World Bank project team reconvened with the Ministry of Health program heads, again in the Ministry of Health’s central conference room. By this time, four of the Ministry’s program heads had raised issues with the numbers and the assumptions on which the economic tool was based. The director of the Ministry’s Program on Environmental Health spoke up at this meeting, stressing his four decades of experience working in the Guyanese health system and his understanding of the shifting dynamics of the population, which he emphasized simply weren’t represented in the population numbers and outputs of the World Bank’s cost effective budgeting tool. The idea that infectious diseases needed to be deprioritized in relation to non-communicable diseases, as the budgeting tool suggested, did not consider what he experienced as a growing gap between Guyana’s rich and poor. His understandings were based on his epidemiological work, he noted, but also on his daily interactions both inside and outside the health system. Nodding vigorously throughout his colleague’s comments, the director of Food and Nutrition argued that as both a citizen of Guyana and as a physician, he could see things that the budgeting software couldn’t.

The program heads emphasized their experience in public health and medicine in Guyana, and knowledge of the place as its citizens, pushing back on the outputs of the World Bank’s cost-effective budgeting software. And rather than a tool integrating global expertise wielded by World Bank economists, cost effectiveness tools—bound up in software—became a site of debates over sovereignty. Here senior staff of a Caribbean government health agency argued for a different course, in the face of staff and consultants from one of the world’s most powerful international institutions and the economic tools through which they advanced their priorities.

The process of running the budgeting tool and debating its results fulfilled requirements contained in two World Bank and Inter-American Development Bank (IDB) loans, which obligated Guyana’s Ministry of Health to have a mechanism for incorporating best practices and cost-effective measures into its strategic planning. However, the banks did not continue to enforce the results of the economic exercise in the face of resistance from Guyanese health care professionals. While the cost-effective budgeting process was meant to identify targets for upcoming loans, the lack of credibility of the tool among the directors of the Ministry of Health meant that its results were largely left aside—as Anand described, “it just sort of fell off the map.” Throughout my ethnography on World Bank and IDB health projects, the results of the prioritization activity never arose in any planning meetings, nor were they mentioned in subsequent strategic planning documents for loans in Guyana produced by either the World Bank or IDB.

In addition to debates with Guyanese health professionals and administrators, the role of economic tools in relation to broader government priorities has also come into question between development bank offices in Guyana and the institutions' headquarters. Situated in close contact with Guyanese government agencies, local offices of these banks have struggled to negotiate between their Guyanese clients and development bank headquarters in Washington, DC. For example, while the IDB's Guyana office was meant to use the outputs of the cost-effective budgeting exercise to guide the planning of future projects, the office instead shifted to basing its strategic planning on the new development strategy of Guyana's ruling party. This document became the guiding principle for the Country Strategy that IDB develops every four years with each of its client countries. And although the health sector had been a central pillar of every Country Strategy in Guyana since the mid-1990s, the 2012–2016 Country Strategy moved to a focus on energy and natural resources rather than public health.

This Country Strategy was one of the first major efforts of a new country office director, who moved recently to Guyana from a position in education in her home country of Haiti. Arriving in the Guyanese capital in late 2011, Sophie Makonnen had worked with team members in the Guyana and Washington offices to produce a new Country Strategy by early 2012. I first met Sophie in January of the following year, one of the first times I ventured into the airy building of IDB's country office, filled with varnished dark wood from Guyana's Amazonian forests. When we met that day, Sophie explained to me that removing public health from this Country Strategy had been an easy decision, noting:

we have limited resources, and doing a bit of everything would give us a weak portfolio. It doesn't mean [health is] not important. It means it's not what is prioritized with our resources . . . we were able to have a very focused approach on energy, because government has requested us to focus on energy, in line with what the country was doing with [the PPP] Development Strategy. (SM Interview, 2013)

She argued that the strategy was representative of what the Government of Guyana had prioritized, and she suggested that the government's electoral mandate gave these priorities democratic credibility.

The Guyana country office had similarly emphasized the importance of local knowledge and democratic priorities, as opposed to economic calculations, in a major disagreement with the institution's board in the period immediately preceding my fieldwork. In an evaluation of Guyana's programs published in early 2013, IDB headquarters had criticized the Guyana country office for not incorporating economic evaluation into planning its Country Strategy, calling the document "a weak instrument" because it failed to "provide evidence from analytical work to justify that investments would produce greater developments than alternative investments" (IDB Office of Evaluation and Oversight 2013, 22). In official documents, the Guyana office responded that the broad lines of lending had been based on the priorities of the country's government rather than the bank's growing emphasis on

economic calculations. The office argued that new standards could not be used to evaluate past programs, stressing that their approaches predated recent bank policies reinforcing the need for economic analyses in the planning of Country Strategies:

A different approach to Country Strategy design governed the development of the CS with Guyana. . . . Previous guidelines emphasized “the need for programming that . . . uses a programmatic and flexible approach to respond to country priorities.” . . . the CS should not be evaluated on the basis of practices and norms that post-date it (IDB Office of Evaluation and Oversight 2013, xi)

Emphasizing their response to “country priorities,” the Guyana country office highlighted the “political will of the Guyanese authorities” as “the decisive factor” driving the Country Strategy (IDB Office of Evaluation and Oversight 2013, xi), and noted that the office’s knowledge gained through interaction with government counterparts in Guyana offered unique insights into local priorities.

This debate between IDB headquarters and their Guyana country office underlines the tensions that arise in the face of development banks’ own conflicting discourses, on the one hand emphasizing technocratic visions of improved governance through expert practice, and on the other emphasizing the priorities of sovereign nations (Rottenburg 2009). But in spite of this confrontation between IDB’s senior management at headquarters and in Guyana, the country office director continued to emphasize the importance of the knowledge she and her office had gained based on negotiations with Guyanese policymakers, and she continued to stress to her staff the importance of designing projects based on the priorities of elected officials and their mandates. Here again, economic tools become sites for debates over sovereignty and the role of government priorities against economic calculations. In these spaces, economic analysis certainly does not serve as the guiding principle for development bank officials designing health programs in the ways envisioned by economists at the DC headquarters. And yet, even those very economists often acknowledge that development banks’ current practices are far from the broad application of economic analysis for which they advocate, as I discuss below.

Aspirations, Absence, and Joy

As I sat next to Angelo and James at World Bank headquarters, in the midst of their debate on incorporating the social distribution of costs into economic evaluations, the senior World Bank health economist on the panel flipped to her next slide. Here the Hungarian economist had noted what she called a “*Sea of Effectiveness vs. Islands of CEA*,” stressing how rarely full cost effectiveness analyses (CEA) were being conducted in the World Bank’s health work. But against this “half empty” vision, as she labeled it, she emphasized a “half full vision” of several robust uses of cost analysis in World Bank projects of late.

This attention to the lack of economic analyses in health programs was not completely new within the World Bank. In 2010, the institution’s independent evaluation group (IEG) released a report describing a decrease in the use of cost analyses in bank projects over the previous several decades, attributing the trend in

large part to the growth of lending in health and associated sectors (World Bank Independent Evaluation Group 2010). The report found that the percent of projects completing economic evaluations dropped from 70% to 25% between the early 1970s and the early 2000s. During a one-year sample period, not a single project conducted an actual cost-effectiveness analysis. The authors stressed that while infrastructural projects continue to conduct cost-benefit analyses, health projects consistently referenced cost-effectiveness analyses, but did not actually make use of them. The report argued that this trend was undermining the legitimacy of World Bank projects, as economic evaluations play a key role in demonstrating that the institution is only investing in projects that are economically sound. For example, in preparation for an upcoming request to donor countries for a “replenishment of funds and increased capital for lending” in 2009, IDB worked to create a “Results Framework” (IDB 2009) establishing new rules for evaluating projects in their planning phase. This framework introduced a requirement that all projects present an economic analysis before they can be approved, but as noted by the IEG report, these official policies have not always been put into practice. At both the World Bank and IDB projects continue to be approved without either a cost-benefit or cost-effectiveness analysis.

Development bank health economists often argue that cost-effectiveness analyses are not used because of the rapid cycle of projects and a lack of data and funds for economic analysis. Operational staff emphasize that they do not have time or money to conduct economic analyses. One World Bank consultant argued, exasperated:

Team leaders are given a budget for project preparation—about US\$90K for most projects. With this budget they have to do everything—pay for consultants that help design the projects, travel, environmental impact, and the [economic analysis] among more uses of funds for project preparation. A proper economic analysis could be very expensive if primary data is needed. For this reason, Bank projects seldom collect primary data for them. In the private sector due diligence of a project is between 2–3% of the project cost, for the current health project that would represent US\$4–6 million, which as you can see does not compare well with US\$90K.

Ironically then, the economic benefits that such analyses could yield do not appear to hold weight across projects and their various stages. The benefits that could arise from implementing more cost-effective projects can’t get a project planning team any more money for their task. These calculations shape the valuing of economic tools in the project planning stage, where project planners and the institution’s senior management have bypassed official policies requiring cost-benefit and cost-effectiveness analyses.

While the World Bank’s 2010 IEG report attributed the decreasing use of economic analyses largely to lending in the health sector, economists in development bank health divisions continue to advocate for cost analyses as an essential aspect of their work, often echoing technocratic frameworks presented over the past 20 years in World Bank and IDB publications that promote cost analysis as a tool for eliminating “politics” from health priority-setting (e.g., Bobadilla 1998; Jamison et al. 1993, 2006; World Bank 1993, 1994). Gabriel Jackman, for example,

is a Trinidadian economist trained in the United Kingdom and the United States who has been working in various capacities at IDB since 1980. Speaking about health priority setting and project planning, he stressed to me the importance of economic evaluation for countering simple political calculus in development bank projects. He argued that without economic analysis, project planning amounts to borrowing governments conducting political analyses of the following sort: “Is my populace asking for health care? Will I get more votes from health care or a metro, or from balancing my budget and controlling my spending?” (GJ Interview 2015). But cost-effectiveness analysis, he argues, allows both governments and development agencies to make decisions based on economic evidence and explicit priorities, to achieve the greatest overall benefit for money spent. Such discourses construct aspirations for global health as a highly calculated domain of experts, with little attention to the ways that assumptions and politics infuse even the most seemingly objective tools.

Such visions of cost analysis—as an objective tool that avoids politics—stand in stark contrast to debates among these same economists who argue at length about the many variables that could be included in a cost analysis (e.g., productivity costs, social distribution of costs, etc.) and the weights they ought to be given, which emphasize the huge impacts the assumptions have on the output of the calculations. Even as they recognize these assumptions, discourses advancing cost analysis as a tool for de-politicization underlie how development bank health economists imagine their work and its possibilities, in addition to the role that cost analysis plays in their daily professional satisfaction, as I discuss below.

She called it her “passion project.” And when Daniela spoke of her new white paper on cost analysis, the register of her voice shifted upward and the cadence quickened—she spoke with energy and enthusiasm. Daniela had originally trained as a physician, but later completed a doctorate in health policy and economics. Over the last several months, she had been working to develop guidelines for cost analysis in the health sector, believing that IDB’s approaches to cost analysis had been too focused on material infrastructure because of the influence of the transportation sector and others that are closely associated. She would often bring up new elements she had introduced into the report, starting with a brief reference but then circling at length through her thinking. She wanted to be sure to include information not only about the approaches that would yield the most *accurate* analyses, but also those that would yield the most *standard* analyses for comparability, and the approaches that wouldn’t confuse her more junior colleagues, who were the audience for the report. For example, should she recommend that her colleagues include in their analyses the costs of care for patients during the years of life that would be extended due to a program intervention? The implications were significant to the output of the analysis, and contemplating these questions was one of the things Daniela describes as liking best about her job. She was particularly excited that later that year she would be able to talk about her white article at an academic conference, where she would see many colleagues from her doctoral training and debate with scholars whose work she had long respected. She kept up closely with the academic literature and maintained connections in the academic world through such conferences.

Many economists in development bank headquarters described to me the joy they take in conducting cost analyses, noting the intellectual stimulation of trying to consider how these economic evaluations can be done better, especially based on limited data. For example, how should one extrapolate data between countries? What should count as a benefit? Daniela and her colleague Patricio explained:

PI: The government and the bank join to decide “we’re going to do a \$50 million health loan in Jamaica” and most likely the government of Jamaica will know that they want to build two hospitals in Kingston, so it is going to be very hard to do an economic analysis that says “you shouldn’t,” or that “you should do *one* in Kingston and one in another place,” or that instead of building hospitals you should invest in primary health care. That’s very, very hard. So at the end of the day I think ninety plus percent of economic analysis have been to justify what has already been decided.

DP: I would say, if we’re being so honest about it, it is more of an academic exercise to have some support for your argumentation and to fulfill our requisite rather than really influencing any decisions.

PI: In that sense, as an academic exercise, we’ve been having a lot of fun in saying “ok, how do you think we should go about doing the economic analysis: which benefits do we count” for example. . . . But I don’t think we can say any project has really changed because of the economic analysis. It’s the other way around. (PI and DP Interviews 2015)

Patricio and Daniela stress that although economic analysis doesn’t have much power at the level of planning projects, the two of them continue to enjoy the process. Patricio highlights how his economic tools have little power in the face of a borrowing country’s priorities, bolstered in part by a proliferation of financing options that has given governments more options for borrowing, making countries less beholden to the options provided by any single development bank. In this context, where economic analyses are unlikely to affect which projects get financed, many project planners feel it is simply not worth putting money into funding cost analyses.

But even in the face of these realities, economic analysis continues to hold importance to Patricio and Diana beyond influencing the design of a specific project. This comes in part from the enthusiasm they have for the *process* of conducting a cost analysis. And the enjoyment is palpable in their conversations about where they can find the most reliable data on the current incidence of malaria among indigenous Nicaraguans, which bank programs in which countries might provide a reliable analogy for estimating the effectiveness of a conditional cash transfer program in Suriname, or how to take into account uncertainties in the cost analysis. As Angelo and James teased each other about including demographic distributions in their analyses, these discussions became fodder for professional banter and intellectual acrobatics. Tracking down data, coming up with creative ways to use existing data sets, and debating with colleagues about what parameters to use in the analysis all become parts of a puzzle, the game of cost analysis that many bank

health economists frame as not only crucial to the *quality* of health programs, but also what makes their work *enjoyable*.

Conclusions

Since the early 1990s, both the World Bank and IDB have led major efforts advocating the use of cost-effectiveness analysis in setting priorities for public health spending in poor countries. Publications and initiatives led by these institutions have played a major role in the growing centrality of economic analysis in global health literatures, where cost analyses now fill the pages of the *Bulletin of the World Health Organization* and other global health journals (Bertram et al. 2016; Bowser et al. 2018; Chang et al. 2017; Marseille et al. 2015; McPake et al. 2015). These approaches have been bound up with a widespread economization of thinking in the transition from international to global health in the late 20th century, led in large part by the austerity logics of these same development banks (Brown et al. 2006; Kenny 2015; Pfeiffer and Chapman 2010). But even in the face of development banks' ongoing emphasis on economic and financial tools as the key to improving global health, through "innovative financing" mechanisms like results-based finance or speculative finance facilities (Erikson 2015), economic analysis plays a surprisingly minor role in planning and implementing the institutions' loans, especially given World Bank and IDB policies requiring the use of these tools.

While economists in development bank research divisions continue to push for the need for more widespread cost analysis within the institution's health programs, economists working in development banks' operational divisions often see cost analyses as *too expensive*, notably because they see these analyses as unlikely to have any impact on the planning of projects. In today's world of proliferating sources of finance, even small Caribbean states like Guyana have options for financing development programs beyond any one development bank. Here, economic tools have become a site of debates over sovereignty in setting development priorities. When health practitioners and administrators in Guyana pushed back on the authority of the World Bank's economic analyses for health priority setting, taking issue with the assumptions and conclusions of the institution's economic planning software, development banks did not simply overrule them to impose the results of the economic tools. Rather than focus project prioritization on such tools, the IDB Country Office in Guyana focused on the priorities of the incumbent government.

But in the context of widespread accusations of government corruption, debates over the use of economic tools to set public health priorities also became spaces for some health administrators to push back on government approaches, stratifying health administrators and their relationships to Guyana's ruling party. And while development bank health economists often express concern about the influence of such electoral politics on the design of health projects, the presence of these politics has not necessarily resulted in *worse* programs than would result from greater reliance on economic tools. Indeed, many scholars have demonstrated how recourse to economic tools can often detract from concerns for social solidarity, by placing concern for economic efficiency above a fine-grained understanding of the relevant histories and politics, or above attention to the neediest (Adams 2013; Murphy 2017; Robinson 2017).

Contradictory tensions surround the use of economic tools for public health even within international financial institutions—these development machines that have so strongly driven global health in the direction of economic discourses and values. For development bank economists, cost analysis is a tool in constructing and reflecting their understandings of the possibilities of global health. It contributes to building an ideal of health lending as a highly calculated effort led by economists, unencumbered by the concerns of party politics. What is more, these economic tools bring enjoyment and professional satisfaction to a set of practitioners largely socialized in the academic world.

Understanding the politics that infuse economic tools is crucial to constructing global health systems that better incorporate the many voices and histories at play. Recognizing the political nature of expert tools is essential to facilitating their democratic governance, allowing for open debate rather than hiding the perspectives of powerful actors in tools that they frame as politically neutral. Some observers will argue that development banks are fundamentally unable to address these political relationships, in part because of the organizational charters that prohibit these institutions from political engagement. Such observers might argue that the past failures of development banks, combined with these institutions' inability to directly confront the politics of their work, make them a poor vehicle for advancing public health internationally, such that development banks ought to be removed from work in global health or even dissolved entirely. Other observers might argue that incremental change is possible, so that development banks can better take into account the politics that shoot through economic tools and their use in global health. In either case, recognizing the politics of economic tools is essential for creating systems that allow for political negotiation rather than inhibiting participation when politics play out in expert tools. A failure to engage with these politics simply bolsters the unequal power dynamics that continue to maintain such vast inequalities in our world.

Notes

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